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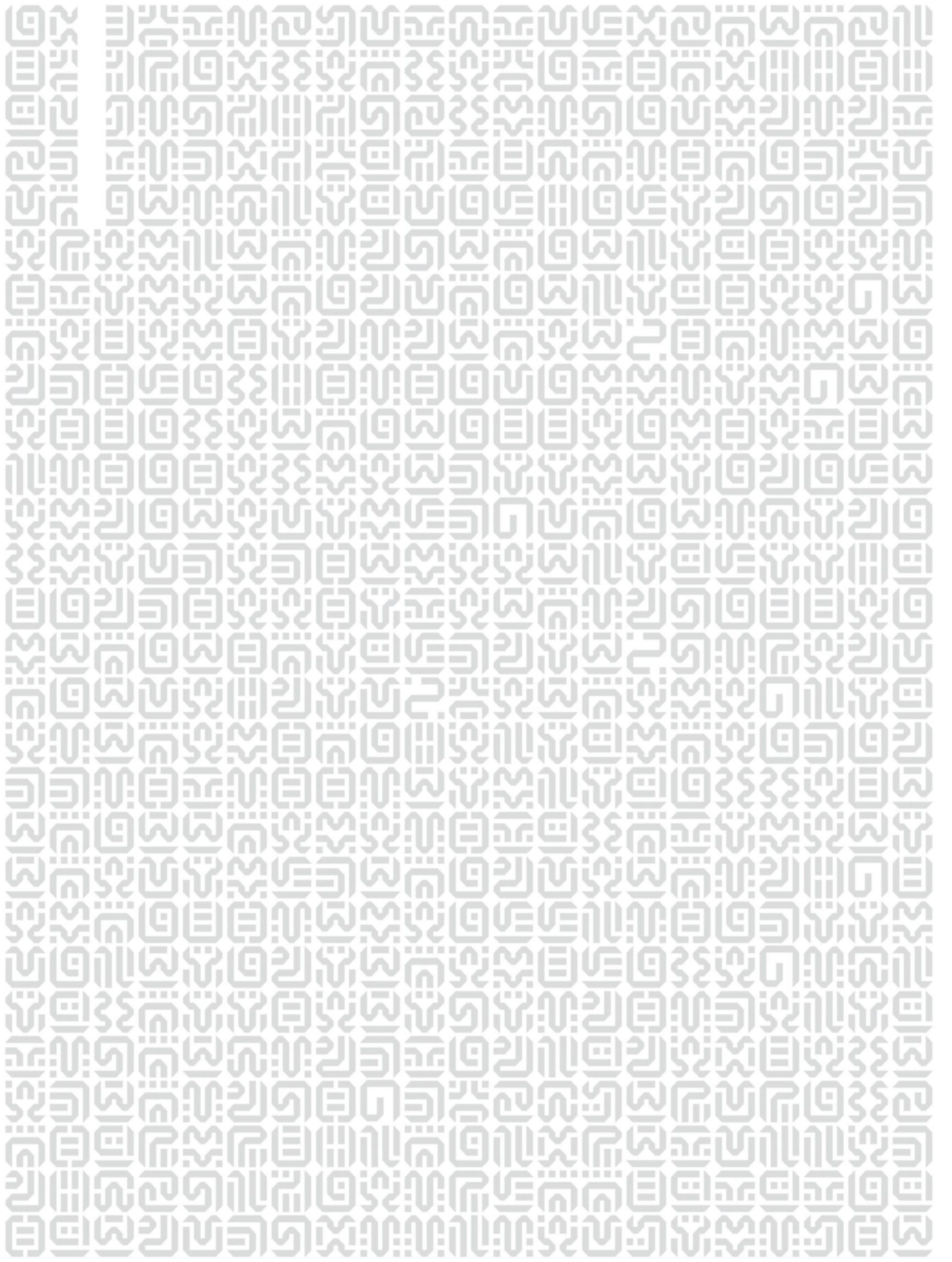
The Legend Of Zelda:

Breath Of The Wild

Reviewed Link's awe-inspiring Switch debut

Plus The story behind the game's creation



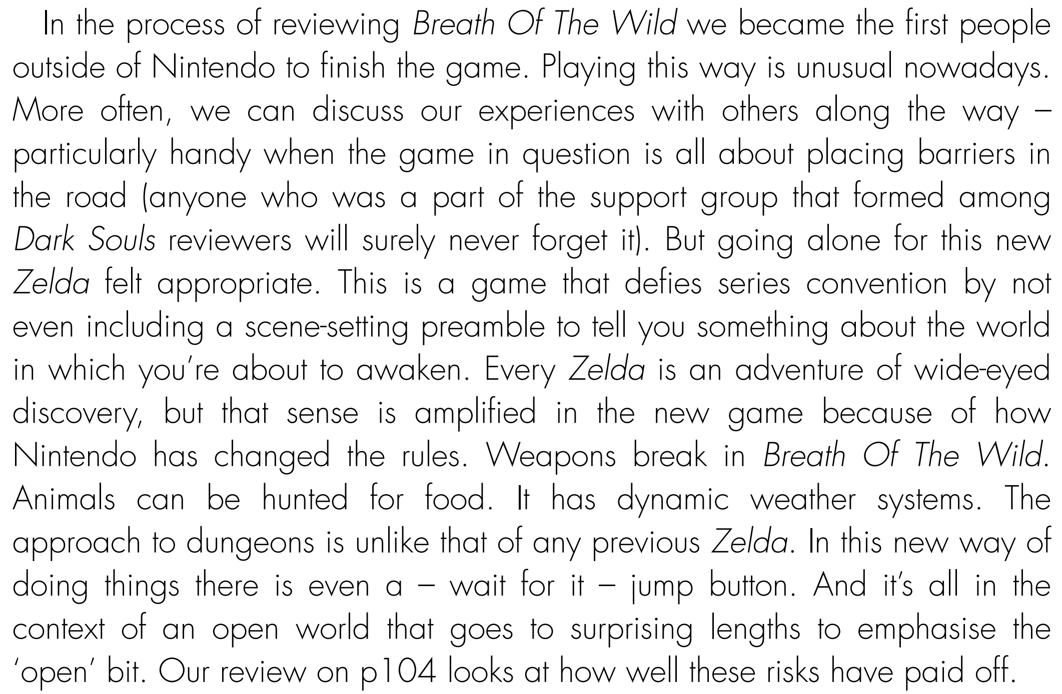


It's dangerous – and joyous, and gripping – to go alone



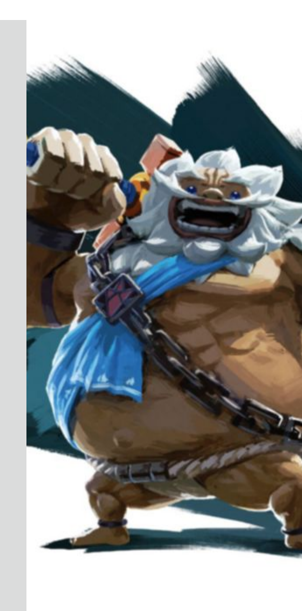
Exclusive subscriber edition

Certain game series exist on a plane one notch above everything else, their new entries seeming to make the world stop for a moment. It's a minuscule category, reserved for only the most storied of thoroughbreds. Plenty of heavy-hitting names – *Uncharted*, for example, along with *Halo* and *Call Of Duty* – don't make the cut. We've narrowed this exclusive club down to just three, in fact. First, there's Rockstar's irrepressible *Grand Theft Auto*. Then there's *Mario* (in the proper *Mario* game sense, that is). And then there is *The Legend Of Zelda*, whose latest instalment has been consuming our lives lately.



In the process of reviewing *Breath Of The Wild* we became the first people outside of Nintendo to finish the game. Playing this way is unusual nowadays. More often, we can discuss our experiences with others along the way – particularly handy when the game in question is all about placing barriers in the road (anyone who was a part of the support group that formed among *Dark Souls* reviewers will surely never forget it). But going alone for this new *Zelda* felt appropriate. This is a game that defies series convention by not even including a scene-setting preamble to tell you something about the world in which you're about to awaken. Every *Zelda* is an adventure of wide-eyed discovery, but that sense is amplified in the new game because of how Nintendo has changed the rules. Weapons break in *Breath Of The Wild*. Animals can be hunted for food. It has dynamic weather systems. The approach to dungeons is unlike that of any previous *Zelda*. In this new way of doing things there is even a – wait for it – jump button. And it's all in the context of an open world that goes to surprising lengths to emphasise the 'open' bit. Our review on p104 looks at how well these risks have paid off.

It may be extremely difficult to predict Switch's longterm fortunes ahead of the console's launch, but if it doesn't succeed it won't be because Nintendo wasn't able to deliver a must-play game on day one. On p62 *Breath Of The Wild* director Hidemaro Fujibayashi tells us how Nintendo went about reinforcing *Zelda*'s standing as one of gaming's rarest treasures.



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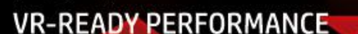
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Clicking into place?

High-profile indie and middleware support ramps up as Switch prepares for liftoff

The best thing to happen to Switch since January's formal unveiling came just two weeks before the console's launch, and did not come from Nintendo. Epic Games' release of a new version of Unreal Engine 4, the first to formally support Switch, could provide the software shot in the arm the system, on January's evidence at least, sorely needs. Native support from one of the most popular, and powerful, thirdparty engines around is a big boost for a console whose early months look, to put it politely, a little on the quiet side.

Yet to be fair, things have improved markedly on that front in the few short weeks since Nintendo unveiled its ambitious, if somewhat muddled, console to the world. A more open attitude from Nintendo to the indie scene is long overdue, certainly, but no less welcome for it, and smaller studios have helped bolster Switch's modest first-year lineup.

Multiformat players might not be too excited by the announcements of games such as *Stardew Valley* and *The Binding Of Isaac*, which have long been available on other platforms. But securing some of the best and brightest names in contemporary indie development will help shift, if only subtly, the common perception of the console. Switch is now about more than *Zelda* on the move.

> A more open attitude from Nintendo to the indie scene is long overdue, but no less welcome for it

The Unreal deal, however, could prove critical to the console's prospects in the longer term, and not just because Nintendo is using the engine itself (Shigeru Miyamoto claimed in a recent interview that his employer's internal teams had "mastered" the engine). It makes Switch that much more attractive to developers of multiplatform games, making compiling a build for Nintendo's console as easily, theoretically, as any of UE4's other supported platforms. It has already yielded a Switch release for *Snake Pass*, the playful Sumo Digital puzzler that has always looked like it belonged on a Nintendo console. Others may follow: Unreal support does not necessarily eliminate the risk of releasing a game on a platform facing a highly competitive market, but it certainly reduces the investment required.

It's good news, then, and big news too – though much of that is down to how oddly silent Nintendo has been about its new console since that January unveiling. Understanding that, as Eiji Aonuma told us last month, Nintendo needs to get Switch into as many pairs



THE BINDING OF ISAAC: AFTERBIRTH+

Developer Edmund McMillen **Publisher** Nicalis
Origin US **Release** March 3 (US), TBA (EU)

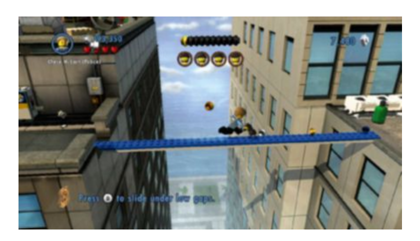
Edmund *Super Meat Boy* McMillen's twin-stick Roguelike horror show debuted on PC in 2011, but has changed significantly since, with a steady flow of expansions. While a launch title in North America, there's no word yet on an EU release, with publisher Nicalis presumably working hard to get this grim, darkly religious game past the censors.



GRACEFUL EXPLOSION MACHINE

Developer/publisher Vertex Pop
Origin Canada **Release** Spring

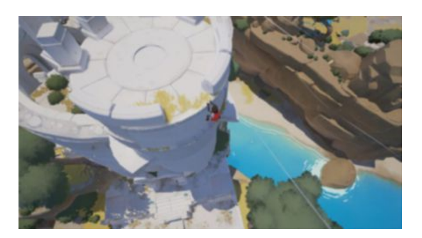
This chunky, vibrant shooter is that rarest of beasts: a true thirdparty exclusive for Nintendo's console. It pays homage to side-scrollers of yore, with a beefy four-weapon setup and deep combo system adding complexity to the traditional high-score chase. Though it may not stay exclusive for long – it was showcased at last year's PlayStation Experience, too.



LEGO CITY UNDERCOVER

Developer TT Fusion **Publisher** Warner Bros
Origin UK **Release** Spring

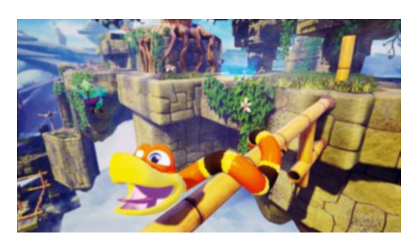
TT Fusion's open-world crime caper released for Wii U in 2013, but sales hardly matched those of the multiformat Lego games. Another chance comes with this re-release, also due for PC, PS4 and Xbox One. There's no confirmation of a performance bump on Switch, but if they can get those dreadful loading times down, we'll be happy enough.



RIME

Developer Tequila Works **Publisher** Grey Box, Six Foot
Origin Spain **Release** May

One of the earliest consequences of UE4's support for Switch is this beautiful, mysterious adventure that graced the cover of **E**273. After a few years in the wilderness this perspective-shifting tale of a boy alone on a strange island is on the verge of release – a happy ending for a game we feared was the latest victim of the fabled Curse Of **Edge**.



SNAKE PASS

Developer/publisher Sumo Digital
Origin UK **Release** March 29

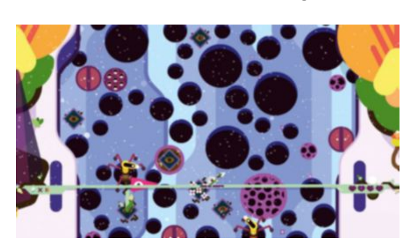
Sumo's colourful, playful puzzle-platformer simply belongs on a Nintendo console, and is now bound for Switch thanks, again, to Unreal Engine 4 support. Were it not for the HD sheen and the weighty, painstakingly modelled physics of its slithering central character, this could be an N64 game – and, yes, that's meant as a compliment.



UNTITLED TAIKO NO TATSUJIN GAME

Developer/publisher Bandai Namco
Origin US **Release** TBA

Bandai Namco's arcade drumming game was a fine fit for Wii, despite the lack of a physical drum to hit, and it'll soon be repeating the trick with a pair of Joy-Cons. Only a handful of games in this 16-year-old series have been localised, but since Switch is region-free, you can always import. Were the pound not virtually worthless, of course.



TUMBLESEED

Developer/publisher Team Tumbleseed
Origin US **Release** Spring

This self-styled 'rolly Roguelike' is a vertical-scrolling puzzle game in which you must steer a seed away from a host of chasms and obstacles. *Tumbleseed* is headed to multiple platforms, but its developer – whose work includes credits on *Threes*, *Ridiculous Fishing* and *The Unfinished Swan* – is talking up the Switch version, particularly its use of HD Rumble.



ULTIMATE CHICKEN HORSE

Developer/publisher Clever Endeavour Games
Origin Canada **Release** TBA

The rebirth of the single-screen local multiplayer game is quite the boon for Switch's kickstand mode, and this raucous title will be one of the first to arrive. The twist here is that competitors build the level as they play, adding traps and obstructions in between rounds in an attempt to thwart rivals without also hamstringing themselves.



WORLD OF GOO

Developer/publisher The Tomorrow Corporation
Origin US **Release** March 3

The Tomorrow Corporation is re-releasing its beloved physics puzzler, along with follow-ups *Little Inferno* and *Human Resource Machine*, in a bundle containing all three games' Kyle Gabler-scored soundtracks. *World Of Goo* remains the highlight, but its companions have plenty of quirkily satirical delights to offer too. A pleasant surprise.

BIG IN JAPAN
While one recent TV ad yielded a brief look at *FIFA* on Switch, support from the major western thirdparties is still conspicuous by its absence. In Japan, however, things are rather different. A recent developer survey conducted by long-running Japanese magazine Famitsu painted a rosy picture of Switch's fortunes, with over half of respondents saying they were currently developing for the system and only one in six saying they had no interest in it. That may improve following the Unreal Engine 4 announcement: the US-made engine is increasingly popular among Japanese studios, with the likes of Capcom, Square Enix and Bandai Namco now using it to power the latest entries in some of their biggest franchises.

of hands as possible to properly showcase its potential, the company has embarked on a series of public tours around the world. Yet as we send to press, two weeks out from launch, many of the console's finer details remain unknown. There's been a little dribble of information about the online service – the value proposition when compared to PlayStation Plus and Xbox Live Gold now looks a little more flattering given a predicted annual cost of between ¥2,000 and ¥3,000 (£14 to £21) – but there's still no news on how its matchmaking and voice-chat features will work. There's been nothing about the Switch Virtual Console or eShop.

The one constant has been Nintendo's continued insistence that Switch is not intended to replace 3DS, or kill the wider concept of a dedicated Nintendo handheld. In reality, this is Nintendo merely hedging its bets, leaving the door open for a return to old ways if Switch fails to gain traction. Given the obvious benefits of focusing its efforts on a single system that satisfies the needs of both its home- and handheld-console audiences, it is still unfathomable to think that Nintendo intends to split that focus again in the near future – unless, of course, it has no alternative.

That Nintendo lacks the confidence to be honest about its plans is reflected in its advertising strategy which, territory by territory, lacks the crystal clarity of its Wii and DS marketing. A slot during the Superbowl coverage – the most expensive TV-ad space in the world, running a reported cost of $5 million – portrayed the console as being, like Wii, all things to all people: a sleepy-eyed millennial rolling over in bed to pick up *Zelda*; a father and son playing *Arms*; a group of office workers linking multiple consoles for a lunchtime *Splatoon* session, and so on. A trio of Japanese TV ads focus on a single 30-something male, and stress the console's portability above all. In Europe the sell has been towards affluent, diverse and unfathomably attractive people in their early 20s



While it's effective in showing how *1-2-Switch* can be played without crowding around a screen, this scene from a European Switch ad takes a rather fanciful view of how the console is likely to be used for social play

playing *1-2-Switch* at festivals and house parties. A console that offers so many ways to play is a tricky thing to pitch in 30 seconds, sure. And it reflects an understanding of how gaming culture varies by territory. But never before has a Nintendo console had a featureset that can be interpreted in this way.

While final hardware narrowly missed delivery in time for our sending to press, we spent significant time with one of only a handful of consoles in the UK as part of our review of *Breath Of The Wild* (p104). Those Joy-Cons still feel a little small – in the heat of combat we had a few too many accidental clicks of the left stick, which causes Link to sheath his sword and enter a crouch, which is hardly ideal. But that aside, the console is a delight, its display-switching seamless, its control options plentiful – using the Joy-Cons undocked is an unexpected pleasure, reminiscent of the Wii Remote and Nunchuk combo without the tethering wire.

This multifaceted console defies easy categorisation, and has clearly rather befuddled the marketing teams

The UI, meanwhile, is a gigantic leap forward from Wii U's molasses-slow frontend, appearing the instant you press the Home button, keeping the game running in the background. It's even got PS4 and Xbox One licked in one department, but it'll perhaps mean more to those of us in the business of taking screenshots: the Capture button responds immediately with the sound of a shutter and a thumbnail of the image briefly appearing in the top corner of the screen. The dashboard itself is clean, simple and intuitive, available in black or white themes, and comes with a set of comic-strip tutorials that are simple, playful and only occasionally patronising: the HDMI cable, so you know, is the one with 'HDMI' written on it.

With that in mind, perhaps there's a certain logic in Nintendo preferring to focus its pre-release efforts on getting Switch into as many people's hands as possible, rather than poring over its features. This multifaceted console defies easy categorisation, and has clearly rather befuddled the marketing teams. Better to let the people play it, and let them decide what makes it most exciting. That should do for launch, when the life-long loyalists will ensure Switch is a sellout and *Zelda* will spark a wider surge in interest. Thereafter, Nintendo needs to decide what Switch really is, and shout it from the rooftops. ■

Playing Italian

Italy's place within videogames is well established, but a new initiative seeks to take it to the next level

Developers searching for inspiration now have a new resource thanks to the creation of an organisation dedicated to showcasing the cities and landscapes of Italy. Called the Italian Videogame Program, or IVIPRO, the institution is amassing an enormous database to represent some of the country's most evocative and culturally rich locations.

IVIPRO, staffed by five people, is building its collection with the help of tourist boards and cultural institutions, but founder **Andrea Dresseno** knows that certain locations will be of more interest than others. "Ancient villages and villas, fortresses, abandoned buildings, and monuments," he suggests. "Local folklore mixing in with history and legends can further contribute to the characterisation of a location."

IVIPRO will also present the histories behind the locations. "A place is not only architecture but also a potential story," Dresseno says. "I'm thinking of locations where important historical events took place, like in *Assassin's Creed II*." And it'll present the objects found within them: "Even a painting can become an aesthetic or thematic inspiration for a videogame."

Once the first part is launched later this year, developers will have free access to the database, which is searchable via tags. Dresseno uses the example of someone making a game about witchcraft and coming across Triora, a town in Liguria, north-western Italy, where witchcraft trials took place in the 16th century and which features a medieval citadel. From there, IVIPRO will offer further research into themes and specific locations and will put developers in touch with the local film commission, which may be able to help with organising field trips and access to private property.

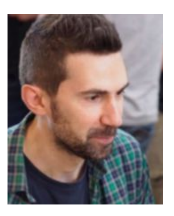
Italy is already a common inspiration for videogames, most prominently in the *Assassin's Creed* series, in which Rome, Florence, Venice and the Tuscan hill town of Monteriggioni have taken starring roles. Monteriggioni's tourist site features a visitor itinerary based on the locations in *Assassin's Creed II*. More recently, The Coalition looked at Fenestrelle Fort in the Alpine region of Piedmont for *Gears Of War 4*, and based the COG's capital city on the late Renaissance fort town of Palmanova, which features a strikingly geometric street plan.

"I consider videogames as a vehicle to promote Italian places and tell stories of our culture"

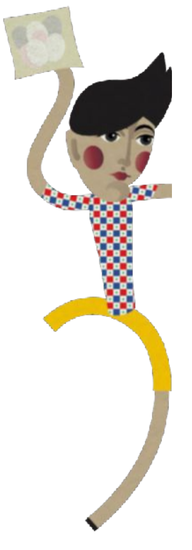
Seeing Palmanova's potential, IVIPRO has started working with its council to reach out to other game developers. Dresseno notes that as well as the obvious attraction of its plan, there's more to discover, such as a series of tunnels that cross under the town and a rich history. As a Venetian citadel it was positioned to protect its empire's frontier against the Ottomans, and as a planned town it was designed to utopian ideals. All residents were to share equal status and the physical shape of the town was intended to drive everyone to artistic, academic and commercial heights.

"Another very interesting star fort is Sabbioneta in Lombardy," Dresseno says, adding that, like Palmanova, it's a 'microcosmos': a highly self-contained place that works well for the technical limitations and creative needs of games.

The ultimate aim of the project is to promote Italy to the wider world.



Andrea Dresseno heads IVIPRO, having established Archivio Videoludico, the first Italian videogame archive, in 2009



Currently self-financed, IVIPRO is looking for backing for its long-term survival, but it's supported by the Italian culture ministry, the game-industry association AESVI, and national and regional Film Commissions Associations.

"I consider videogames as a vehicle to promote Italian places and tell stories of our culture, much the same way as the film industry does," Dresseno says. "They are digital works in which entertainment and culture can coexist. They can also bring benefits to tourism if local institutions understand the marketing opportunities a videogame can create."

Dresseno's first interest in videogames' relationship with the real world came when playing *Broken Sword* and *Gabriel Knight 3*. "The mystery of Rennes-le-Château [in *Gabriel Knight 3*] captivated me so much I decided to go there with two friends of mine," he says. "I became in this way a videogame tourist."

But as well as promoting Italy as a place, he hopes it will help the local game industry. Although it's still relatively small, AESVI announced late last year the results of a survey that recorded a growing number of studios and an uptick in overall revenue. Dresseno is proud of several recent Italian games, including *Wheels Of Aurelia*, the narrative-based game in which you drive down the Italian coast during the political assassinations and kidnappings of the '70s, and *The Town Of Light*, set in Volterra, Tuscany, which focused on the treatment of people with mental disorders before a law closed all Italian psychiatric hospitals.

"I think it's important to deal with themes like this," Dresseno says. "But I'm even happier if a videogame deals with it. Videogames show that they can tell stories of considerable depth." ■

Milan-based Santa Ragione's *Wheels Of Aurelia* is set on the Via Aurelia, which follows the western coast

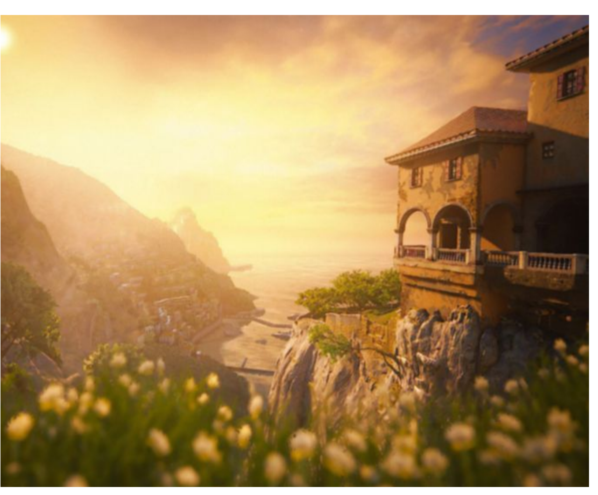
BELOW ***Just Cause 3* is set on a fictitious Mediterranean island called Medici.** BOTTOM ***The Town Of Light* is set in recreations of abandoned Tuscan psychiatric hospitals**







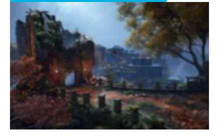




ABOVE CENTRE ***Venti Mesi* by We Are Müesli is a game about the Italian resistance during World War II.** ABOVE ***Uncharted 4*'s art-auction level is set on the Amalfi Coast**

HORRIBLE HISTORIES

Presenting the bad as well as the beautiful



Not all representations of places will be positive for their inspirations. *Gears Of War 4* depicts a fascistic state. "Fascism is an unfortunate part of our history. We cannot expect to talk only about Bella Italia; we also have to be self-critical," Dresseno says. He's similarly reflective about garish game portrayals of Italian stereotypes. "Stereotypes are never positive. However, they exist and it's our responsibility to meditate on them, and possibly to fight them. They can sometimes be funny, but it's important to never forget our critical senses. Maybe IVIPRO's work will contribute to the knowledge of the real Italy, without stereotypes."

No more heroes

Slingshot Cartel is turning its back on music titles – and plans to change how games are made

Freestyle Games is no more. The studio behind *DJ Hero* and *Guitar Hero Live* lives on, albeit scaled down, under new ownership and the name of Ubisoft Leamington. That deal only went through in January, by which time it had already been a year since co-founders **Jamie Jackson** and Dave Osbourn had decided it was time to walk away. Activision, then Freestyle's owner, put the studio through a restructure, cutting headcount and having those who remained support development of other Activision titles, rather than making their own. Freestyle's *Guitar Hero Live* had sold in excess of two million units. It wasn't enough.

"For me and Dave to stay there didn't make an awful lot of sense," Jackson explains. "We were too top-heavy for something that wasn't making games by itself any more. You don't need a creative director, you don't need a design director. It wasn't sensible for the studio to carry our salaries, I guess."

So Jackson and Osbourn – along with Freestyle's art director Gareth Morrison, plus studio manager Jonathan Napier – decided to strike out on their own, starting up new venture Slingshot Cartel, with a mandate to do things differently. But there's no bitterness at how their Freestyle story came to an end. Instead, it's the driving force behind how this ambitious new company intends to function.

Guitar Hero Live, like most games, was conceived by a handful of people. By the end, 120 staff were working on it, and there were often hundreds more people involved during filming sessions for the game's live-action component. Yet while those making the game knew that, sooner or later, a redundancy situation would arrive, the film crews worked without fear. "The movie industry *knows*," Jackson says. "It isn't about redundancy. It's about people working contract, coming in at the right time, doing a job at the right time, and then moving off."

Slingshot Cartel is being modelled in that image. The four co-founders, working remotely or in a shared creative space in Freestyle's home of Leamington Spa, can work on a concept until they're happy with it. At that point, they bring in the help they need on a contract basis and, as Jackson puts it, "pay them until they get it right". It's obviously more cost-effective than keeping 100 staff on the books, but, crucially, it also benefits the game itself, ensuring that the right people only begin work on the game at the right time. "We know that, just because you've got an art team, it doesn't mean they're concept artists; just because you've got a bunch of guys that can make great models, it doesn't mean they can design a great character," Jackson says. "When you're just paying a couple of people to do concepts until they get it right, *then* you load in a team full of artists… It just makes so much sense."

> The DRG Initiative depicts a Running Man-style TV show whose combatants are followed by drone cameras

It's early days for Slingshot's first game, currently codenamed *The DRG Initiative*, though the progress the group has made is striking enough that Amazon invited Slingshot to show an early prototype on its stand at GDC (Jackson and co are using Amazon's Lumberyard, a much-improved fork of Crytek's CryEngine). Already, it's clear to see the potential in the idea, a multiplayer, thirdperson sci-fi shooter that's being built from the ground up with an esports audience in mind. Jackson points out that most successful esports have had their tournament and spectator features bolted on after the fact ("We were playing *Counter-Strike* when we were at Codemasters"); Slingshot, however, is putting the viewer and the caster at the heart of the game's core design.

Set 2,000 years in the future, *The DRG Initiative* depicts a Running Man-style TV show whose combatants are followed by drone cameras, which the caster can flick between on the fly, and even take manual control of. There are no respawns, though each player takes two characters into battle, switching between them after death or in safe zones around the map. In shooters such as *Rainbow Six: Siege* and *Counter-Strike*, permadeath means a slow, tense pace, but here the caster can nudge the tempo by calling an audience vote – awarding health or ammo packs, for instance, for one team or the other. Another element, which the team isn't prepared to talk about publicly yet, will see viewers force the pace in far more dramatic ways.

At Freestyle, Jackson and co sought out challenges like this as a matter of course. They worked out how turntablism could be made into a fun game in *DJ Hero*, then redesigned the guitar controller and became filmmakers as well as game developers for *Guitar Hero Live*. Here they are working out how a live audience, and the presenter, can be used as design tools in a game, while also rewriting the rulebook on how games should best be made. Business as usual, then – but this time, they'll answer to no one but themselves. ■

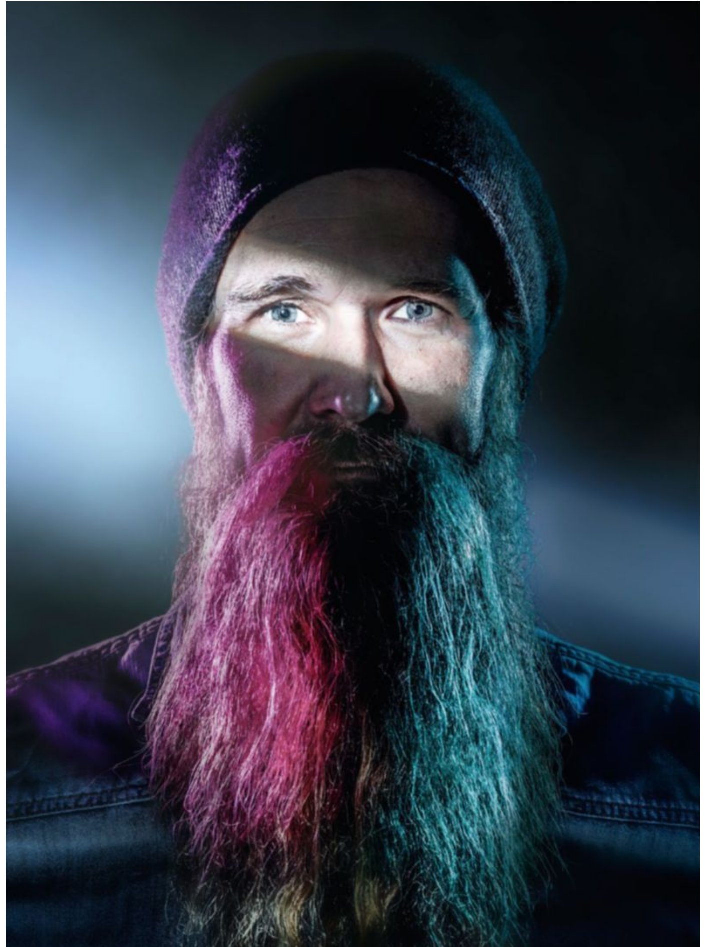
DIFFERENT STROKES

Another vital part of the Slingshot ethos is variety – something Jackson believes creative people need, but are deprived of when working on long-running projects. "I've seen artists get burnt out," he says. "If I'd asked the team at Freestyle to design another band, they'd have probably jumped off the roof: 'No, please don't ask. I want to go and draw space pirates, or whatever.' Then you do that for nine months, and you don't want to draw space pirates any more. I know people say you've got to focus on one thing and do it well, but I think it's about keeping the creative juices topped up, and variety allows you to do that."





CLOCKWISE FROM LEFT
Slingshot Cartel founders Dave Osbourn, Jamie Jackson, Jonathan Napier and Gareth Morrison







MASAYA NAKAMURA

1925–2017

Namco founder Masaya Nakamura died aged 91 on January 22, leaving a vast legacy of coin-op and console hits, along with one of videogaming's most iconic characters. Nakamura established the company in 1955, but it was the advent of the arcade that made the Namco name famous worldwide, first with *Galaxian* and then, in 1980, with *Pac-Man*. The pellet-gobbling character proved such a draw, in fact, that Nakamura came to question the knock-on effects of the game's popularity. "I am a little concerned about the way some young people play it so much," he said in a 1982 interview. "It's not a very happy thing to see people spending so much time on it. Once it goes beyond a certain level, it is not good for young people."

But Nakamura was proud of *Pac-Man* as a piece of innovative design, admiring how creator Toru Iwatani produced a non-violent game at a time when shooting enemies was the norm. "*Pac-Man* was like a sun – everything else faded in its reflection," Nakamura said in 1982. "I don't think we will ever have any game close to *Pac-Man*." Maybe not. But that hasn't stopped the character itself, still starring in games today, such as *World's Largest Pac-Man*, helping to remind us why the world fell in love all those years ago. ■

GAINING PERSPECTIVE WITH AGE

Broken Rules considers the meaning of family and distance in its beautiful new puzzle game

Old Man's Journey is a contemplative journey through a person's life, inspired by a picture of rolling hills fading into the distance. Each beautifully drawn 2D landscape contains paths to wander along, but you're also able to switch between layers of the landscape by using a trick of perspective that recalls the worlds of *Fez*. "That picture emitted a strong sense of depth, distance and, essentially, of wanderlust," **Felix Bohatsch**, of developer Broken Rules, tells us. "After I talked with Clemens [Scott, creative director], we came up with the idea of shaping hills, walking on their silhouettes and switching between them at intersections."

That initial sense of wanderlust inspired the pair to think about why the protagonist was on his journey, and the concept of family surfaced as a common theme, as the entire team have become parents in the past few years.

"One of our core ideals of making games is to work on things that resonate with us on a personal level," Bohatsch explains. "The old man's life story became an emotional progression that we want our players to experience. We want you to be able to empathise with the character of the old man. That progression curve became the base for all our decisions. We designed every aspect of the game – the visuals, the music, the gameplay – to follow this curve and to increase that emotional impact."

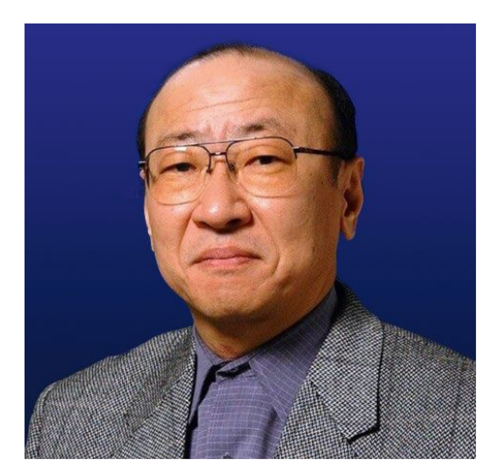
The game will be released on PC and mobile in spring this year. ■





Soundbytes

Game commentary in snack-sized mouthfuls



"It's a tough job, but if I can help create at least one more unique thing for Nintendo to bring to the world, I think I'll be really happy."

Five words for you, Nintendo president **Tatsumi Kimishima**: *The Wand Of Gamelon: Revengeance*



Luigi Novi

"I dunno, in my movies, **people just sit around and talk to each other.** There hasn't been a lot of stuff I've done that would lend itself to games."

Clearly **Kevin Smith** hasn't heard our idea for *Mallrats: The Game*



"I'm going to have a different approach for the next game. What I really want to avoid is, like you see in some games, **characters with big breasts with no backstory."**

If **Hideo Kojima**'s going to do big breasts, they have to have some narrative attached

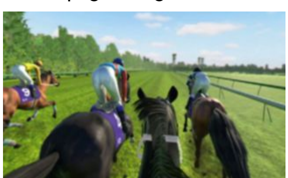
"I got fed up with it. I was fluent in Z80A and 6502 machine language at the age of 14. **And they say *Latin's* a dead language."**



Comedian **Simon Munnery** is well shot of his game-making days

ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Hardware VR Sense
Manufacturer Tecmo

Virtual reality's disruptive assault on the amusement business continues apace with the announcement of this new VR cabinet, devised by console publisher Koei Tecmo. At first, it seems as if the *Dynasty Warriors* maker's involvement has been marginal, since the cab is powered exclusively by Sony hardware – inside you'll find a PlayStation VR headset, a PS4 Pro and a pair of Move controllers – but VR Sense, as the name implies, has more to offer than just a place to sit down.

Koei Tecmo has announced three games for Sense – *GI Jockey Sense*, *Horror Sense* and *Dynasty Warriors VR* – and said more will follow if the system's popular. Yet the real draw is a host of cabinet-powered special effects: a moving seat (for *GI Jockey*), and fans that blow hot and cold to reflect temperature changes in *Dynasty Warriors VR*. With *Horror Sense*, meanwhile, Koei Tecmo promises to replicate the sensation of spiders crawling on the skin, the sort of technological advance that may have you praying for a cataclysm so that we can go back to living in caves. The arcade sector calls these effects 5D, and it's encouraging to see Koei Tecmo embrace the technologies so enthusiastically. We may well pass on the option of a custom-made *Dead Or Alive Xtreme*, though.



My Favourite Game
Steve Aoki

The electro-house producer on the appeal of esports, being a character in Dragon Ball, and betting big on Street Fighter bouts

Steve Aoki is a musician, DJ, producer and the founder of Dim Mak Records. He also set up the Steve Aoki Foundation to support research into degenerative brain diseases, and regularly streams charity matches on Twitch. More recently, he bought esports organisation Rogue, and created a Dim Mak imprint called New Noise, which aims to provide royalty-free music to Twitch streamers.

Why did you buy an esports team?
I might not be *great* at gaming, but I've been a gamer since I was a little kid. I'm always looking at what inspires me, so it's not just about music – it can be any sort of entertainment. With the rise of gaming turning into an actual sport, this was an exciting venture to get involved in. I was researching different teams, and Rogue are kind of like the underdogs who are taking down *Overwatch*. They're local guys, too, from Las Vegas, which is really cool. And they have this edgy vibe and image, and I just thought, 'This is totally up my alley.'

You're also a fairly regular streamer – what is the appeal for you?
I've been really strategic about my streams – it's not like I'm sitting down and gaming every day. I don't really have the bandwidth to do that as I'm either producing music or touring a lot. But whenever I can, I like to make an event out of it. I met up with Team Liquid recently, and we all gamed together on *Overwatch*. That was a lot of fun. And before that I was doing a *Street Fighter* thing with Twitch where I was battling other artists. It was fun to watch.

TOUR DE FORCE
Steve Aoki founded Dim Mak Records in 1996, and the label has since released music from a diverse range of artists and bands including MSTRKRFT, The Kills, Klaxons and Bloc Party. Aoki has been prolific in his own output, too, remixing tracks by artists such as Drake, Kanye West, Eminem and Lil Wayne, and has released four studio albums to date. His relentless touring has established him as a major international act – visit bit.ly/steveaokitour for details of his current tour, which spans the US and Europe.



You lost $10,000 in a charity match with Kid Ink. That must've been tense.
It's a lot of money, but we make sure it goes to charity – and I donate a lot anyway. But when you're playing it's like you're watching the Superbowl and you've got money on it. It gets rid of the whole, 'Oh, let's just have fun' mentality. It's like, 'No, I *have* to win.' [Laughs.]

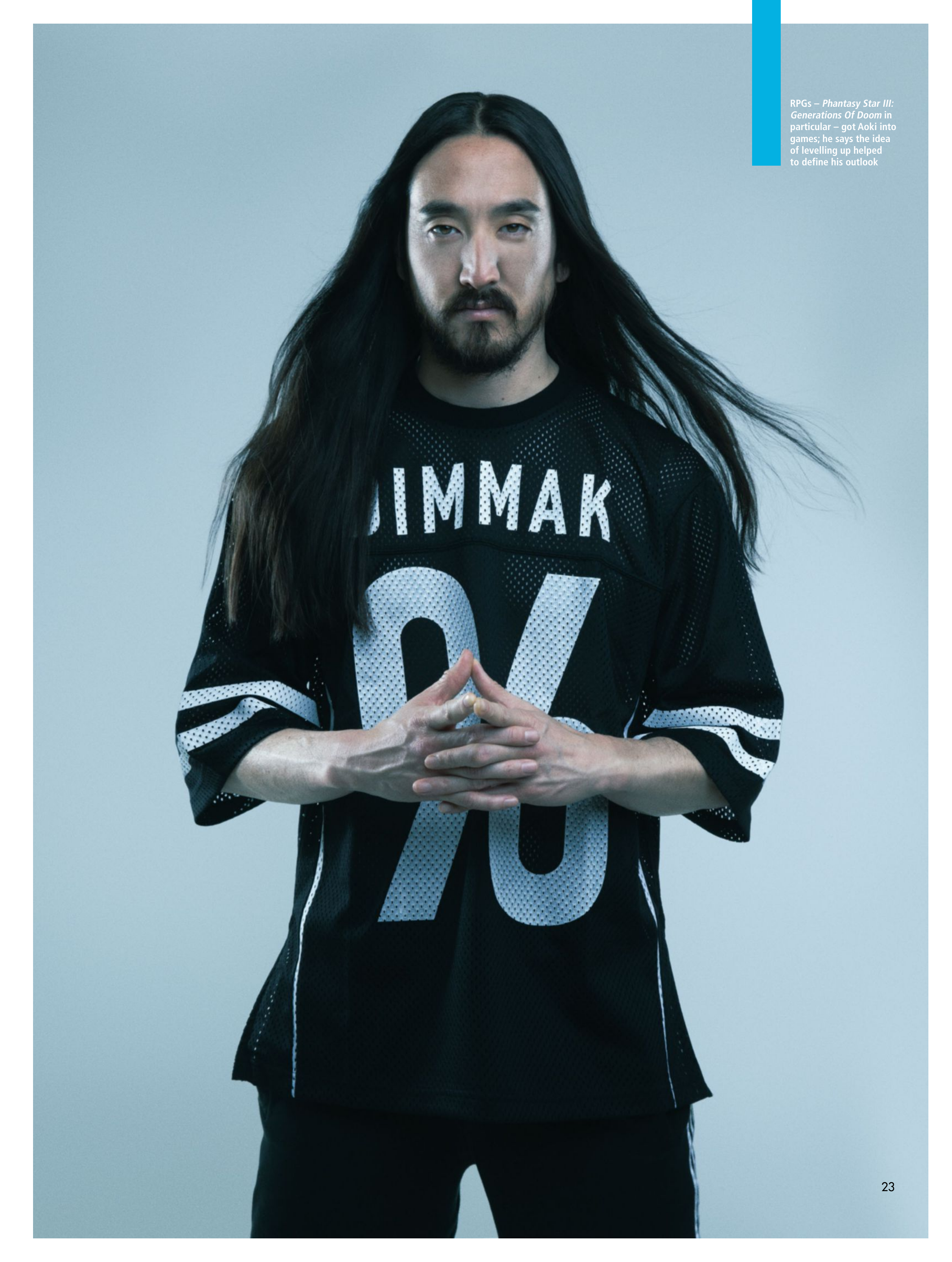
Do you play much when you're on tour?
For the most part last year I would produce on the road, but this year I'm spending a lot more time at home so I'm gaming on the road instead. I play a lot of iOS games. I've put out my own iOS game called *Beat Bomb*, and made exclusive music for it that's only available in the game. But I actually travel with a PS4 as well – I have an LED monitor that sits on top of the console. I've just got *Mafia III*, and I'm looking forward to playing *Call Of Duty: Infinite Warfare*. At home I have an Xbox One with *Gears Of War 4*, too.

> "Getting to be in the game was not even a cherry on top – it was just extra fucking cake"

As well as *Beat Bomb*, you're also a character in *Dragon Ball Xenoverse 2*. How did that come about?
That was a really big moment for me. I'm an anime junkie, and when I was at college I was in an anime club, and every week we'd go to sit in a hall and watch animes, trade soundtracks and geek out over them. My 18-year-old self would be jumping up and down like a little kid if you'd told him he was going to be in *Dragon Ball Xenoverse 2*. Originally they hit me up about doing some music for them, and then getting to be *in* the game was not even a cherry on top – it was just extra fucking cake!

On the topic of music, what was the thinking behind New Noise?
I'm always trying to find different ways to fuse my platform, and the Dim Mak platform, to create these bridges between our worlds. I remember in 2007 when giving away music was a huge taboo. We gave out a single and a lot of the partners that we had were upset about it. But the records we gave away were also the records that sold the most… New Noise is the same kind of circulation concept. We created a sublabel so that it's easy for gamers to use our music when they're streaming. It was a big push for us to make sure that we put ourselves out there in the Twitch community, in the gaming community: 'Hey, you guys can use our music for free.' That was the whole point – get our music out there, and give back to gaming culture a bit more.

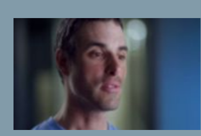
And what's your favourite game?
It changes over time. Nowadays I don't have time for RPGs too much. I tried to play *The Witcher* and *Fallout*, but you don't really get that far in a couple of hours of gameplay. So now I'm like, 'Get me into a mission, let me shoot some people up.' I'm still hooked on *Black Ops*. It's incredible – the movement, the look of it. I'm excited about the next one. ■



RPGs – *Phantasy Star III: Generations Of Doom* in particular – got Aoki into games; he says the idea of levelling up helped to define his outlook

WEBSITE
Zkillboard
bit.ly/zkillboard

A melancholy atmosphere descends after a few minutes spent watching Zkillboard's *EVE Online* live map. Red blobs sporadically burst into life and then fade across the cool blue-and-white interactive star map of *EVE*'s New Eden. Each temporary spot of heat represents a ship's destruction, and by extension a pilot's death, as thousands of explorers, traders and interstellar ne'er-do-wells go about their business in this vast universe. Each kill is accompanied by the victim's profile, through which you can learn more about the pilot's stats, including ships destroyed, ships lost and who most recently brought their life to an end. You can flick between a full map of New Eden or its wormholes, or filter to Hisec, Lowsec or Nullsec areas. A strangely relaxing, if rather morbid, distraction.

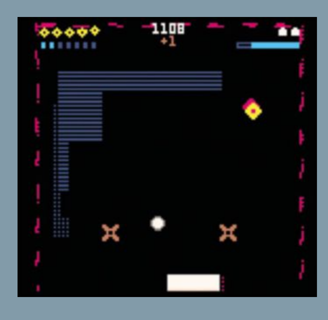


VIDEO
Pillars Of Eternity documentary
bit.ly/pillarsdoc

Originally only available to Kickstarter backers, Mike Mitchell's documentary The Road To Eternity has now been published on YouTube. The film charts the fall and rise of Obsidian Entertainment after the cancellation of a big-budget Xbox One RPG left the company in financial dire straits. Despite hitting this low, the studio's decision to turn to Kickstarter provided a lifeline, of course, and led to *Pillars Of Eternity*. Given the recent announcement of *Pillars Of Eternity 2*, seeing how close the studio came to collapse makes for fascinating, and sobering, viewing.

WEB GAME
Pröng
bit.ly/pronggame

Created for the Pico-8 virtual console by veteran Amiga demoscener Ilkke Melentijavic, who's currently art lead at Australian indie studio SMG, *Pröng* is a singleplayer, high-stress spin on *Pong* and *Breakout*. You control a bat at the bottom of the screen and must keep a ball in play. The ball will bounce off of the top, left and right walls, but you'll lose a life if it disappears off the bottom of the screen. You're not locked to that plane, however, and must venture upwards into the screen to collect coins. You can boost by holding Z, and ghost through the deadly obstacles, which gradually clutter the play area with each completed level by holding X – though the ball can also pass straight through you. The gaudy visuals and uncompromising challenge recall the best of Terry Cavanagh's output.



THIS MONTH ON EDGE

When we weren't doing everything else, we were thinking about stuff like this

LAPTOP
Acer Predator 21X
bit.ly/predator21xlaptop

Acer's Predator 21X curved-screen laptop is likely to make your eyes water for several reasons. It costs $8,999 (at the time of writing, with UK pricing yet to be announced), it's ugly in that way that's exclusively reserved for high-end gaming kit – a thickset mess of aggressive, faux-stealth angles with an imposing bezel – and you might just put your back out trying to lift the thing. But it is also, undeniably, a formidable feat of engineering. The hefty unit packs two Nvidia GeForce GTX 1080s, a Core i7, six speakers, five fans, nine heat pipes and a mechanical keyboard. The curved screen folds down awkwardly over the keys, leaving a kind of grimace when closed, but looks great in use. The Predator is a ridiculous creation in every sense, but an attention-grabbing proof of concept nonetheless.



continue

Cover costs
Crowdfunding platform Fig sets aside $500k for devs to spend on polish

Player of games
Elite Dangerous adds a commander editor

Career drift
Warner Bros reopens Avalanche Software for work on a *Cars 3* game

New pipeline
Moveable game folders finally reach Steam

quit

Hado-ryu-ken
Ultra SFII's motion controls need a little more time in the dojo

Death to all Pews
Nazi? Don't be daft. Wrong? No doubt

Dirty look
We do not know how our VR headsets lenses are getting this grimy

Snuffed out
But Valve's muddled Greenlight goes dark

TWEETS

New executive order: Any negative reviews of *THPS5* are fake reviews.
Tony Hawk @tonyhawk
Professional skateboarder

On a celeb tour of LA we drove past Notch's house. Tour guide's line was, "He's very rich, but still tweets about how lonely and sad he is".
Steve Hogarty @misterbrilliant
Writer

When people say AR and VR will merge I give them a 10% chance of being able to explain what they mean by that.
Chet Faliszek @chetfaliszek
Writer and developer, Valve Corporation



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DISPATCHES APRIL



Issue 303

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins a year's subscription to PlayStation Plus, courtesy of Sony Interactive Entertainment



PlayStation.Plus

Lie low on Switch

In the past, I have written sprawling letters to **Edge** on intellectual topics, embellished with cultured references and literary flourishes. Today, after reading your feature in **E**303, I find myself in the grip of an existential crisis that calls for a more primitive, plaintive howl: to Switch or not to Switch?

Although utterly enamoured with the company's hometown of Kyoto, a detail not as irrelevant as it seems, I've never been a big fan of Nintendo. I had a brief love affair with the Wii (who didn't?) and enjoyed a handful of games on the New 3DS that you guys once awarded to me (mostly *Hatsune Miku Project Mirai DX*). But here's the problem: Kyoto is a friendlier, quirkier, but also more relaxed city than Tokyo or Osaka, and even though Nintendo manages to capture the first two characteristics of its spiritual home quite well, it falls dramatically short when it comes to the third.

Allow me to explain. I absolutely love the defining concept of the new console: the seamless blend of mobile and home gaming is a stroke of genius, and its hardware looks handsome and welcoming. It is a triumphant masterclass in tech design, especially compared to some of the cheap-looking monstrosities fielded by the competition. But the launch lineup is, for me at least, a total disaster. The lack of thirdparty support could almost be taken for granted, but I'm talking about firstparty games. Apart from *Breath Of The Wild* (and *Zelda* never enthused me, unfortunately), all the flagship titles, from the ridiculous-looking *Arms* to the seemingly frantic *Splatoon 2*, appear garish, frantic, childish or some combination thereof.

Dear Nintendo, can we at least have one or two titles for grownups? Something slow-paced and mindful, perhaps? (The zen-like *Endless Ocean*, one of my all-time favourites from my Wii days, springs to mind.) In short: something that, on some admittedly abstract level, reminds me of Kyoto.
Fabrice Saffre

Seems like you've made your mind up already, Fabrice. These are all fair points, except the bit about *Arms*, which is brilliant fun. Thank you for coming at the topic from a unique angle, though. And now it's back to some more regular programming...

Switched off

Nintendo is dead to me now. Switch is the final straw. I am done, utterly done, being a Nintendo fan.

I was excited at first. After the initial ad, and the amazing *Zelda* trailer, I was thinking that Switch would be my first Nintendo console since the GameCube. I was playing devil's advocate to its detractors and was already looking forward to *Zelda*. Then came Nintendo's announcement show in January, and along with it all the pricing and specs. And that's when it all came crashing down around me.

> "I was excited at first. I thought Switch would be my first Nintendo console since the GameCube"

So, let's see. In the US, $300 for the Switch, $70 for the controller that doesn't suck, $60 for *Zelda* and around $45 in taxes; that's close enough to $500. That's $500 to play *Zelda*, folks, a game with cutting-edge graphics from 2012! I think I could just stop there, really, but there's oh so much more goodness, isn't there?

First you've got the outrageous pricing for Nintendo's other peripherals: $90 for an extra dock, $80 for an extra Joy-Con. Next, you've got Nintendo's shockingly pathetic and condescending online offer, where they ever-so-generously offer one free, measured-in-megabytes ROM game to play for a single month before they take it back! Wow. Just wow. Third, you've got the (shocker!) paltry specs of the console itself. Here we are in 2017, and we can't even get 1080p on a brand-new console. Next, there's the


www.facebook.com/edgeonline
Discuss gaming topics with fellow **Edge** readers

two-and-a-half to six-and-a-half hours of battery life, which, let's face it, a few months after you've been using it and the battery degrades means less than two-and-a-half hours of portable play.

Last but not least, you've got the pathetic lineup of games. Forget the multiplatform titles, because the Switch loses to my PC every time. Under exclusives, the only compelling things on offer in 2017 are *Zelda*, *Splatoon 2*, *Xenoblade 2*, and *Mario Kart 8* (a glorified reskin). That's it, because *Super Mario Odyssey* will be delayed. You all know that, right? *Arms* looks fun for a few laughs, but it's hardly the next *Rocket League*, and *1-2-Switch* looks like a $20 tech demo being sold for $50.

So, yeah. So long, Nintendo. I don't wish you luck because your arrogance, stupidity and stubbornness are holding us all back. If you make a few essential games in the next few years, I'll just wait and play them on an emulator in 2022.
Rayburn Odom

We're only printing this so that it'll be seen by the fellow who told us **E**303's cover story had "no hope or joy for the medium". Suddenly our take looks like an outrageously optimistic one.

Back my Switch up

In Dialogue in **E**303, I noticed after one person had written in about his concerns for the Nintendo Switch, you said that you had received many emails like that. Don't get me wrong, I have worries as well – one being Nintendo trying to switch (yes, I went there) PS4, Xbox One, and PC players over to their new console. But I personally love the system.

Why? Because Nintendo isn't about the specs. As much as that is now helpful in modern-day videogames, Nintendo is persisting to view games the way they did 20 or 30 years ago. And that, generally speaking, is keeping the fun in videogames. It's quite evident that now gaming has become more of an online thing, with teenagers and adults tucked up inside their bedrooms with a headset on, shooting things (there's more to it, I know) and stuff like that. It's never been my cup of tea, even though it is all of my friends', but I do like playing games that are more fun rather than competitive. Which is why, at a young age, I fell onto Nintendo's path. Even now, they still want to make unique gaming experiences, without just focusing on how powerful the console is, and which graphics card they are putting in, and this is what I love about the Nintendo Switch. It genuinely looks like something fun, something that is different, and something that is new to the world of games. The fact that you can change from your TV to playing on a handheld screen in a couple of seconds, is, quite frankly, revolutionary.

I love it. Not everyone will. Some people prefer high-quality graphics, and I have nothing against that. As I said, I do have my concerns, although right now I'm putting those aside, as they are more about the wider audience. Yes, maybe one day I will end up switching (sorry, again) to an Xbox One or PS4, if Nintendo quits the console market and becomes a thirdparty console or mobile game developer (though I'm sure everyone agrees with me that we don't want to see that happen). But for now I'm going to lavish praise on the Nintendo Switch – maybe not everyone's cup of tea, but certainly mine.
James Baldwin

Some positivity at last. It says a lot about the tone of this month's mail that we're awarding you a free PS Plus sub. If you're not about to get a PS4, it is of course Vita compatible, or you could flog it to an appropriate friend for some cold hard cash.

Job switch

I have just read Adam Dutton's letter (**E**302) where he talks, among other things, about not having any more *Uncharted* games unless they are given to a thirdparty. I'm not so sure we have seen the last of Nathan Drake. Would Sony really kill off its golden goose?

I can see a game where Nathan Drake becomes the next Jack Bauer, called out of retirement because some evil bad guy has kidnapped Sully or even Chloe (see the link there?!), and unless Jack – sorry, Nathan – recovers some artefact from some obscure place in the world, they will be killed. Cue a race against time around the world solving puzzles and climbing handily coloured cliffs and walls leading to a thrilling climax with said bad guy…

I exaggerate, of course, but while Naughty Dog remains wholly owned by Sony, I wouldn't say it's the last of us. Sorry, the last we've seen of Nathan Drake. Meanwhile, I am off to copyright my idea.
Lukgargnes

Or you could do the Designated Survivor thing, which is essentially Jack Bauer in The West Wing. Nathan Drake for president! (Could a person made entirely out of tiny electrical pulses running through a PS4 do a worse job than what's in place now?)

Switch on the lights

Jen's in Margate. Kids being looked after by friend. I'm in a dimly lit pub trying to read **Edge** but the typeface is too small.
Tim Topple

Sorry about that, Tim. We'll see what we can do. And please do keep sending us updates on how your life's going.

We party

Richard and Slim are at it again Yes it is Quiz Night on this coming Friday 10th February 7.00PM starting at 7.30PM £2 per person max team four. I hope to see you there, sorry about short notice computer troubles
Slim

If anyone is in a position to help Slim with his computer troubles, please let us know. Spam-filter recommendations are always welcome here, too, of course. ■



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

So my friend and I are walking down the street, punching and kicking everyone we meet, and occasionally throwing car tyres at them or stabbing them with broken bottles. This is such fun that we decide to do the same thing in a videogame. Happily, *Double Dragon 4* has just been released on PS4. As it turns out, though, we spend all of 15 minutes on it before deciding that it is terrible and switching to the highly satisfying *Neon Chrome*, a moodily lit sci-fi Roguelike twin-stick shooter that uses around a billion times as many pixels and more than four frames of animation.

On another recent weekend, I book tickets to see La La Land in the cinema, not because I expect to enjoy it but because I know my companion loves musicals, and I am a notoriously selfless filmgoer. As it turns out, we both love it to bits, and I decide there and then that anyone who doesn't think it is one of the greatest movies ever made is to be pitied and slightly ridiculed.

The contrast between these two experiences illustrates a peculiarity about videogames as a medium that I'll call the Genre Silo Effect. If you're not a fan of musical films – or fantasy novels, or late-19th-century Scandinavian plays – you can still go and see one, and you might enjoy it. In this way I was gratifyingly surprised by La La Land, as I have been previously by my first sceptical forays into genres such as military science-fiction novels, or puppet theatre, or country music.

On the other hand, it can be not just difficult but impossible to enjoy a videogame in a genre with which you are not already intimately familiar. My friend and I tired of *Double Dragon 4* very quickly because, or so it seemed to us, the fighting system was both boringly simplistic and unreasonably difficult. But perhaps if I'd misspent more of my youth playing *Double Dragon* games, rather than *Defender* in arcades or *Manic Miner* on a ZX Spectrum, I would understand the satisfying depths and nuances of the gameplay better, and so have a higher opinion of the latest game.



Illustration kaeru.com.ar

It can be not just difficult but impossible to enjoy a game in a genre with which you are not already intimately familiar

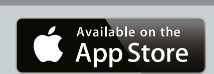
The same goes for a lot of videogame genres, which rely on a whole host of deep conventions and traditions. Having not seriously played any kind of proper martial-arts-style fighting game since *Tekken* and *Soul Calibur* on the original PlayStation, I have literally zero chance of enjoying a contemporary one unless I spend months doing my homework — and yet I can easily enjoy kung-fu actor Donnie Yuen's brilliant turn as a staff-wielding blind Jedi wannabe in the most recent Star Wars film. You can also thrill to the space battles in Rogue One even if you've never seen a sci-fi film before, but if you've never played a *Defender*-alike, you'll be hard pushed to understand what the hell is going on in *Resogun* (and even if you have, Housemarque's game is confusing at first). Meanwhile, if I wanted to, I could watch any of the Fast And Furious films and maybe even like them – but since I haven't played a racing game in years, I have absolutely no chance of enjoying whatever the best new racing game is unless I put in dozens of hours of training (or, as I like to call it, crashing into roadside barriers).

Films and novels rely on genre conventions and expectations too, but of course the difference with videogames is that they are, as the academics like to say, ergodic – you have to do stuff; they are a species of work. And the particular kind of skilled work you have to do in each kind of long-established videogame genre can create a very high barrier to entry, and so to wider aesthetic enjoyment. Hence the Genre Silo Effect, which exists in no other artform: genres can become, to all intents and purposes, utterly impenetrable to outsiders.

For this reason thinking about videogames as a whole, across all the different genre silos, may now be less useful as an analytical cultural category than viewing each genre as a specific artform in itself. In this, as in other ways, games are more like sports: to think about 'sport' in the abstract is near-meaningless, but to think about football or tennis certainly isn't. So I feel no need to apologise to *Double Dragon* aficionados any more than I feel sorry about telling someone I don't enjoy watching baseball, or admitting that the game I'm most looking forward to this year is *Ace Combat 7*. Why Bandai Namco's game in particular? Because I've played all the others in the series, so I'm absolutely sure I'll understand this one.

Steven Poole's Trigger Happy 2.0 is now available from Amazon. Visit him online at www.stevenpoole.net


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zinio



NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

The kid, in case you were wondering, is still appalling at *Mario Kart*. I spent the first three years of his life longing for the day when he'd ask me if we could play a videogame, but now it is merely the latest addition to an ever-increasing list of things I'll tell four-years-ago me about becoming a father when they finally invent time travel. It's a weird sensation: he barrels over to me (boys of this age can only barrel; no other verb quite captures their ungainly, wayward, terrifyingly powerful hurtle) with steering-wheel controller in hand, asking if we can play *A Mario Driving Game*; my heart suddenly swells with pride, then almost immediately deflates when I remember what's about to happen. I am going to sit and watch him run out of time in Time Trial mode – because, yes, you can actually do this, after ten minutes, a fact of which only parents are aware – and I am going to have the Mario Kart Stadium music stuck in my head for the rest of the day.

Suffice it to say that my son is not quite ready for videogames yet – but he knows who Mario is, and understands that he is brilliant and exciting even when he's not gormlessly bumping his go-kart into a trackside wall for ten solid minutes at a time. One evening he saw me watching the *Super Mario Odyssey* trailer on my phone, put his tantrum into standby and sat on my lap, watching, enraptured, unable to contain either his excitement or his curiosity.

When I hear an E3 crowd go nuts for some ho-hum announcement or other, I assume the crowd is full of paid-for, bussed-in hype merchants. When a magazine or website publishes some lengthy speculative tract based on nothing more than a trailer, I assume it's because they have pages to fill, or SEO content to produce, or whatever. But kids are genuine to a fault, and for a minute or so there we were united, albeit for very different reasons, in our unfiltered excitement for *Super Mario Odyssey*. A pal's three-year-old insisted on

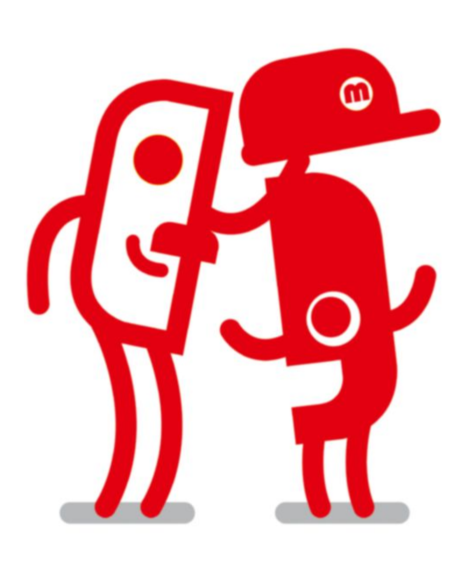


Illustration **kaeru.com.ar**

> When I thought about all those moments, I saw my kid's abject uselessness at Mario Kart 8 in a different light

watching that trailer five times on the spin, getting more excited every time, until his father put a stop to it because he was worried that, if he continued, the kid would spontaneously combust.

You don't need to have children to understand that a substantial part of the reason we love games is because they make us feel like kids; that they allow us to dodge the expectation that, once you reach a certain age, you no longer need or have time for the simple pleasures of play. Yet no company brings out my inner child quite like Nintendo, and so it's no surprise to find that my son and I were brought together by the sight of Mario gambolling around in the *Odyssey* trailer.

Perhaps it's a question of timing. Ours is, after all, the Nintendo generation; Mario et al feature in our earliest gaming memories, and have been a constant ever since. Watching the *Odyssey* trailer, my son may just have been wide-eyed at the colourful, carefree playfulness of it all. But I was thinking about the first time I found Top Secret Area in *Super Mario World*. About the day I got an N64 and practically sprinted home with it. About the evening before the UK GameCube launch, when a Woolworths (remember that?) advert in the paper (remember those?) alerted me to a bundle offer that I simply couldn't refuse, and the weekend-long *Super Monkey Ball* session that followed. And then there's the Sunday afternoon when I lay on my bed, face down and propped up on my elbows, for four hours finishing *Super Mario Bros 2*, and my forearms went numb during the end credits.

And when I thought about all those moments, I saw my kid's abject uselessness at *Mario Kart 8* in a different light. As Lakitu's starting light goes green and Yoshi veers immediately into the nearest bit of roadside scenery, I realise that my kid, too, is just a couple of feet over the starting line of his own journey with Nintendo – a company whose games have been part of my life for almost all of it, and which I hope will prove a similar gaming fixture for him. Switch is almost upon us, and there's no way he's ready for *Zelda*. But in six months or so, when *Mario Odyssey* arrives, things might be different. Perhaps we'll actually sit and play it together; maybe I'll even be able to watch him play without grinding two more layers of enamel off my teeth. I'm looking forward to it. If he goes barrelling around the lounge with that expensive tablet controller in his hands, though, he's in for a right old hiding.

Nathan Brown is **Edge***'s deputy editor. No kids were harmed in the making of this column, though plenty of go-karts were*

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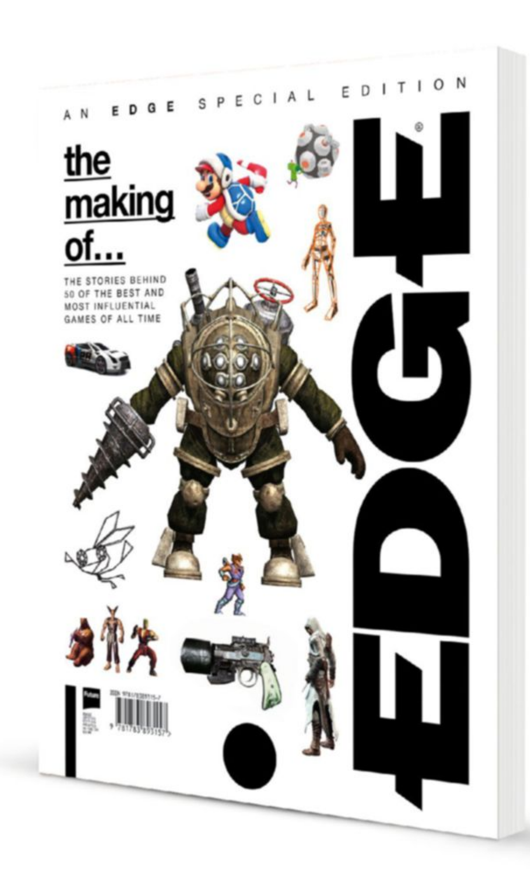






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#304

HYPE

THE GAMES IN OUR SIGHTS THIS MONTH

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Explore the iPad edition of **Edge** for extra Hype content

Meddle with honour

Videogames may be synonymous with innovation, but a great many traditions also endure in them, too: rigid genres, particular ways of doing things, unwritten rules that we all take as read after years of familiarisation. This month's Hype section provides a cross-section of games that straddle, to varying degrees, these apparently opposing positions.

Take *Yakuza 6* (p40), for example, a game steeped in the traditions of both the culture it portrays and decades of Sega history. Its series proudly flaunts its disinterest in modernity as one of its most appealing aspects, but even Yakuza Studio has now softened its stance on a few aspects that were maybe trailing a little *too* far behind the times.

Thimbleweed Park (p48) is even more obsessed with nostalgia, reviving the spirit of one of the point-and-click genre's earliest classics and in the process attempting to capture the charm that seemed to leak out of the adventure bubble like a slow puncture over the years. But while those 8bit-style visuals should whip up a torrent of memories for fans, developer Terrible Toybox isn't so shortsighted as to ignore decades of progress.

On the surface, *Get Even* (p44) and *Project Cars 2* (p36) both appear to be steeped in the culture of their respective firstperson and racing genres. But both are fiercely bucking against the strictures set in place by years of iterative refinement. *Project Cars 2* continues its predecessor's spurning of piecemeal career modes, but also raises the bar by introducing dynamic puddle pooling, an unprecedentedly detailed tyre physics model, and deformable surfaces. More than that, it chucks out the age-old mantra that driving sims should be challenging not fun. And *Get Even* continues to surprise with its flagrant disregard for established rhythms and beats.

Traditions are all very well, then, but videogames are richer for the fact that fewer and fewer developers feel honour-bound to adhere to them.

MOST WANTED

The Surge PC, PS4, Xbox One
Nioh and *The Ringed City* have increased our appetite for tough *Souls* – or *Souls*-inspired – outings, and *The Surge* will be our first opportunity to experience one in a sci-fi setting. The latest trailer may be all CG, but it does tease a boss fight with a hulking, plasma-cannon-wielding tank on tracks. We can't wait to ruin its day.

Little Nightmares PC, PS4, Xbox One
A chance to run through a more polished version of the build we played for **E**302's cover feature reveals a more confident showing for the toe-curling Janitor and Six's wonderfully tactile platforming.

Nier: Automata PC, PS4
Review code may not have arrived in time for this issue, but we're by no means worried about the state of Platinum's debut RPG. The *Bayonetta* dev's peerless combat, and director Yoko Taro's unique madness, remain an intoxicating blend. Platinum's always been a bit left of centre, but it's never let us ride a moose before.



HYPE

PROJECT CARS 2

Slightly Mad aims to not only overtake the competition but lap them, too

Developer Slighty Mad Studios
Publisher Bandai Namco
Format PC, PS4, Xbox One
Origin UK
Release May 6

The first time we take 27R, Fuji Speedway's opening corner, in a Mercedes-AMG GT3, we brace ourselves for the usual anxiety-stricken nightmare of slowing for and negotiating a tight turn in a simulation game. The tarmac will feel like it's slicked with oil, accurately and consistently meting out power to the rear wheels will be a nightmare using the trigger, and the car will inevitably punish us for even entertaining the idea of relying on those four rubber contact patches for grip.

To our surprise, though, the GT3 remains confidently planted the whole way around the bend. This is too easy. On the second time around we push a little harder, and still the car carries us through to the apex without drama. We ramp it up again for the third lap and discover yet more compliance. This isn't how simulation games usually feel. We ask one of *Project Cars 2*'s devs to turn off every driving aid and switch our demo to manual shifting before taking another shot at it. This time we can steer on the accelerator and gently correct our line after pushing the car up to the limit of its traction. This feels fun. This feels like actual *driving*.

"A big challenge that we've had to overcome is the mindset of a generation that has grown up on simulators that have just been difficult for the sake of being difficult," game director **Stephen Viljoen** explains to us. "If it's a simulator then god forbid that it might be fun; it's got to be *really* hard. I've spoken to so many real-world race drivers and not one of them considers real-world racing to be a hard day of, 'Ugh, I've got to get out there and do this again, day after day out on the race track.' Motor racing is one of the most thrilling and exciting sports. It is *fun*. And how more authentic can you get than the real thing? So if the real thing is incredible fun, then how do you end up with a simulation of the real thing and there's no fun in it? [Driving in sims is] always like treading on eggshells. And that's what we've worked so hard to get right."

The perennial problem of hair-trigger grip limits in racing games is a problem that has long frustrated racing driver (and former Top Gear Stig) **Ben Collins**, who has worked with Slightly Mad on both *Project Cars* games. "We made some really good progress [with *Project Cars*]," he says. "You could just start to float a powerful car out of a hairpin and get it to dance a little bit, but if it bit you, it bit you quite hard. I was so pleased with the way the cars handled, and the power-to-weight ratio, but that aspect was still a bit troubling. We've been able to focus on that in *Project Cars 2*. Now you can drive badly and get away with ▶



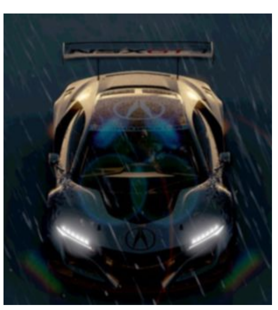


FROM TOP **Game director Stephen Viljoen and creative director Andy Tudor**



"With *Project Cars*, we finally got to be in the same sentence as [*Gran Turismo* and *Forza*]," Andy Tudor says. "With *Project Cars 2*, the battle is definitely on for this year's best and biggest racing game"





Project Cars 2 will feature dynamic seasons and day/night cycles on every track



Ben Collins, racing driver and consultant

it – you won't be fast, but you have the compliance you would in a real car. It's not like a Scalextric track where you have to keep getting up to put the car back on the track each time you make a mistake. You just keep going, and as a result it's more fun, and you learn faster. I think it's a huge breakthrough."

Part of the reason for this improvement to handling is the focus Slightly Mad has placed on tyre and track physics. The studio's Livetrack 3.0 and dynamic weather technologies combine to replicate track surfaces in unprecedented detail. Surface deformities are accurately recreated, and stray wheels can bring dirt from the tracksides onto the tarmac, changing the level of grip you'll have on the next lap. Meanwhile, Slightly Mad's confident retort to *Forza 6*'s three-dimensional puddles is realtime pooling and run-off. Grassy surfaces will absorb water until saturated, then send rivulets onto the

> ***"It's completely rebuilt from the ground up but without throwing everything away"***

track that gather in exactly the same places they would on the real-life equivalents. This is a remarkable step forward for the genre alone, but comes into even sharper focus when paired with the game's obsessive simulation of tyre compounds – a direct result of the studio's strengthened reputation after the first *Project Cars*.

"We are able to get in and get access to technical data that tyre manufacturers are typically very secretive about," Viljoen explains. "Now, because they know that we go for this level of authenticity, they're willing to work with us to provide us with this data, so that we can provide an authentic simulation of the tyres. It's crazy – that these guys are willing to trust us with this information is a serious compliment."

This improved standing with manufacturers and racing associations has had repercussions in every aspect of the game. *Project Cars 2* features more than 170 licensed cars, and 60 tracks (the largest lineup of any console racing game to date). It has also given the studio a little more clout in its pursuit of unprecedented access.

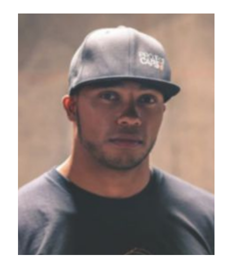
"It's one thing to get car manufacturers on board," Viljoen says, "but we also request things in the licence agreement that other developers don't. Part of what we ask for is access to one of the factory drivers so that we can provide them with the game with their car in to test, and we will not be happy until they tell us *they're* happy. For these companies it was just like, 'What? We've never been asked to do this before. This is weird.' And we just insisted, and said this is how we need to do it. And it's worked. They've finally opened up and we're getting to the point where we have access to those drivers from most of the manufacturers we have in the game."

All of this would be for little if Slightly Mad stuck with the well-intentioned but disappointingly noncommittal pad controls of the first game. It's a relief, then, to find that, while there are still plenty of customisation options available, the studio has refined and presented its idea of an optimum setup. And it's very good indeed.

"We've just blitzed it," creative director **Andy Tudor** says, wearing an expression of unapologetic satisfaction and pride. "Last year we knuckled down for a month where it was just, 'Right, everyone get the gamepad out – we're going to nail this *now*, far in advance of the game coming out.' We went through various versions of gamepad handling, trying different things that different people on the team preferred, and then just ironed it all out through playtests."

The result is an assured, responsive setup that satisfyingly complements the game's deeper track and handling physics. At no point do we feel like we're wrestling with an array of haphazardly positioned sliders.

"It's that difficult second album – we can't rest on our laurels," Tudor says. "We're not just making an iterative sequel here. If you look at the game compared to the last one, it's completely rebuilt from the ground up, but without throwing *everything* away. So there's still that great core there, but we've replaced bits, enhanced bits, added new things. It's not *Project Cars 2017*. It's so much more than that." ■



Career mode

Like Ben Collins, European Touring Car Cup and British Touring Car Championship driver **Nicolas Hamilton** (above) has been heavily involved in the development and testing of both *Project Cars* games. The sequel will introduce racing licences and aims to offer even more support to esports players – something that's particularly close to Hamilton's heart. "The more realistic our games can be, the more opportunity we have to create new driving talent," he says. "If it wasn't for *GTR*, I wouldn't have got the chance to start a real racing career. It makes me even more inspired to make sure our game is accessible to everybody, so that even if you don't know much about motorsport, you can learn about it and the techniques involved in being a racing driver."



TOP **Flinging powerful cars with warmed-up, sticky tyres around wide circuits is an exhilarating, but realistically forgiving, experience.**
RIGHT **Ice surfaces currently feel a little *too* slippery – a problem that the team acknowledges and intends to improve before release**

TOP **"It's just like supporting a wheel for us now," Andy Tudor says of *Project Cars 2*'s Rift mode. "[The tech is] so good, and it makes you a better driver, so why wouldn't we support it to the same extent?"**
ABOVE ***Project Cars*' vehicle models are exquisite, as are the game's weather effects.**
MAIN **Every surface feels different, and dirt pulled onto the track from offs will remain. If it then rains, dirt will turn into slippery mud**



Series stalwart Kazuma Kiryu sets out on a new adventure in the first *Yakuza* game to take advantage of PS4's power. Japan cinema legend Beat Takeshi (far left) plays a grizzled Hiroshima yakuza

HYPE

YAKUZA 6

Kiryu and co get a long-overdue overhaul in the most lavish Yakuza game in years

Developer	Yakuza Studio
Publisher	Sega
Format	PS4
Origin	Japan
Release	Out now (Japan), 2018 (EU/US)





Heavens above, an autosave. *Yakuza 6* may be the fourth game in Toshihiro Nagoshi's intoxicating series to arrive on PS4, but it's the first to truly feel like it's been built for it. This series has often felt a little behind the times – it's a vital part of its charm, and entirely in keeping with a game that plays on, and with, publisher Sega's rich heritage. Yet the series' continuing insistence that we could only save our progress between chapters, or at telephones out in the world, has pushed that concept to its extreme. Well, no longer. Here, every item we pick up or buy, every morsel we consume, every purchased upgrade or soundly battered group of enemies sees our game saved on the fly. What a world.

If that seems like something of a strange thing to be excited about, we assume you're not a *Yakuza* fan. As such you're unlikely to be particularly fussed about the countless other ways in which Yakuza Studio has brought its decade-old series belatedly up to speed. There are cars – *cars!* – driving along the streets of Kamurocho. Street fights start within a split-second of you encountering a group of ne'er-do-wells. Buildings are now part of the world – protagonist Kazuma Kiryu simply pushing open doors and walking through them, with no need for loading screens – and Kamurocho is more vertical than before: one building might house three or four different businesses or ways to pass the time.

Every item we pick up or buy, every morsel we consume sees our game saved on the fly

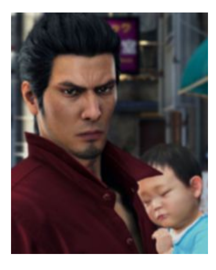
The result is that *Yakuza 6*'s Kamurocho, while still benefiting from the familiarity of a setting that stands the *Yakuza* series apart from other, itchy-footed open-world games, frequently feels like a whole new world. It's busier, more believably detailed, and much better-looking, with new lighting and shader systems complementing the greatly improved character models and animation. A robust physics engine, meanwhile, sees scenery react to Kiryu's actions: plastic curtains part around him as he walks into a restaurant, furniture is shunted away when he bumps into it, and a kick to a grounded opponent sends them skidding comically across the floor.

Combat, while retaining many of the series' hallmarks, has also been overhauled. It's a good deal harder, for a start: enemies are more intelligent, putting their guard up during gaps in combo strings, and attacking from behind when you're whaling on one of their allies. Character upgrades are now bought using experience points, spread across multiple categories, that are earned as you win fights, complete quests and explore the world.



This is a game of many technical steps forward, then – but after the origin story of *Yakuza 0*, which shed the series' narrative baggage by winding the clock back to the late '80s, *Yakuza 6*'s return to the present day means a return for some of that old bloat. The language barrier presented by our Japanese code plays a part, but this is slow to get going, and it doesn't help that you're spirited away from that beautiful new Kamurocho to the new secondary city of Hiroshima early on. Even worse, you'll spend much of it strolling along with an infant in your arms; Haruka Sawamura, Kiryu's unofficially adopted daughter, disappears, comes to term on a pregnancy she'd kept secret, then is put in a coma by a hit-and-run car accident, and Kiryu is left holding the baby. A ripping yarn it is not, at least early on. Legendary Japanese actor Beat Takeshi, performance-captured in the role of an ageing Hiroshima yakuza captain, seems a little wasted in the context of a game where you spend 20 minutes walking the streets of Hiroshima late at night, looking for a store that's still open to sell you milk.

No doubt that will change; *Yakuza* games have often been slow burners, and much of the charm is lost in the absence of translation. In one Kamurocho building we find a cat café with only one feline in attendance, offer our assistance and leave with a selection of cat food in our inventory. We meet a man on the street arguing with his girlfriend, and later help him woo a cam girl on his laptop. Eventually, when the Deep Silver-published localisation arrives next year, we'll get to fill in the blanks. In the meantime we're happy bumbling around in the greatest incarnation yet of one of our favourite videogame lands. ■



Baby blues

While Haruka's offspring spends most of the time in your arms slumbering happily, when it's awake you'll frequently pine for a babysitter. Every couple of minutes you'll be forced into a timed Trouble Mission, charged with calming the screaming infant using one of four motion-controlled gestures. Get it right, and you'll fill a portion of a bar that, when fully stocked, brings the mission to a close. There's no apparent penalty for failure, though enduring the full two minutes of a baby crying through your controller speaker is punishment enough. You've no way of knowing which of the four options will work, and if you get it wrong, the process resets. An accurate portrayal of the early days of parenthood, then, and every bit as fun as it sounds.





TOP **In a questionable series first, one downtown parlour offers sessions with live-action camera girls, who grow progressively flirtatious – and flimsily clad – as you complete strings of button prompts.** BELOW **Kiryu's Heat bar can, as before, be spent on special moves – but now a tap of R2 will instead put him in a powered-up state. Nearby scenery will be automatically picked up for use as a weapon, while mashing the light attack button will trigger a QTE-powered combo.** RIGHT **While the classic Rush combo template – light attacks followed by a heavy finisher – survives, you can now tack an extra heavy attack onto the end. But it's slow to start up, and you'll often be knocked out of it by the new, smarter enemies**







TOP **The new Clan Creator mode is a low-stress spin on the RTS, in which you can send up to 100 characters into the field to do battle, occasionally triggering Heat moves that do heavy damage, or buff allies.** ABOVE **Kamurocho has never looked better, been so full of things to do, or been so easy to navigate – wait until you see Kiryu's new mantle animation for knee-high scenery. It's a shame you're transported to Hiroshima so early, but the new setting is not without its charms**





GET EVEN

The Farm 51's thriller gets more mysterious with every step taken into its world

Developer The Farm 51
Publisher Bandai Namco
Format PC, PS4, Xbox One
Origin Poland
Release May 26

As has already been well established, *Get Even* isn't a firstperson shooter or puzzle adventure, and it certainly isn't a survival-horror game. But it *is* built on the foundation of its creative director's deepest fear. "The very basis of the game is what I'm scared of most," **Wojciech Pazdur** explains. "I'm a father, I'm 30-something, so I'm not afraid of zombies or aliens. I'm afraid that someone could do something bad to my kids and I wouldn't be able to help them."

That sense of helplessness, and parental lament, is reflected in protagonist Cole Black's obsession with the girl he may or may not have rescued from the hostage situation he has patchy memories of prior to incarceration at the rundown asylum he now finds himself in. And while there's no evidence that the girl was related to Black, she was *somebody's* daughter, and as the target of his extraction mission she was also his responsibility.

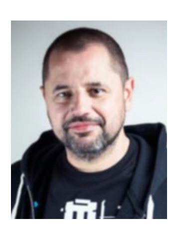
"The main intention is to make you feel something," producer **Lionel Lovisa** explains. "We're going to toy with people's feelings, not genres. And so we wanted a local story that you could believe was your own. And we build our mechanics around what we want people to feel at each point in the story."

Having seen a larger portion of the game now, we're happy – and relieved – to report that it remains as inscrutable as its opening hour even after some of the major plot points have taken root. While The Farm 51 has tightened up the game's opening – there is now, for example, a handily positioned enemy to teach you how to perform stealth takedowns where before we breezed through the demo without ever realising a melee option was available – it's what lies beyond Black's initial asylum orientation that really intrigues.

The mysterious headwear that Black finds himself locked into, it turns out, is a Memory Visualisation Headset, codenamed Pandora, which is designed to allow him to access and relive memories of events he has already experienced. These memories are triggered by looking at photos of particular locations, and through these portals we work our way through a number of past missions and some darker, less official activities.

Once drawn in, Black experiences events as if they were real. He feels pain and can interact with objects and people in the world, but closer inspection reveals his subconscious poking through the mantle. Since Black's recollection is shaky, he misremembers some aspects of the environment, and these fizzing anomalies can be scanned using your phone or gun to change things around you – conjuring up large planters that can be used for cover, for example. Black's thoughts ▶





FROM TOP **Producer Lionel Lovisa and creative director Wojciech Pazdur**



ABOVE **While the asylum is a hackneyed setting, it's put to good use during the time you spend wandering its halls – even if the muddle of browns and greys can occasionally feel a little overbearing. Through smart sound design and plotting, however, the setting feels like a great deal more than the sum of its parts.**
LEFT **Evidence you snap on your phone, as well as all the documents you read, are added to a hub area that collates everything you've found and allows you to draw links between events, characters and locations**







ABOVE ***Get Even*'s locations can feel a little dowdy at times, but close inspection reveals remarkable levels of detail thanks to The Farm 51's use of photogrammetry.**
TOP RIGHT **A series of surreal dream sequences offer clues as to Black's past, as well as other characters – not least the man who is holding you captive.**
MAIN **Sneaking past guards is sensible, but *Get Even*'s gunplay feels solid when a firefight breaks out.**
BELOW LEFT **Lovisa approached one of the writers who worked on Derren Brown's Trick Or Treat TV series, having been drawn to the similarities between the two projects.**
BELOW RIGHT **You're armed with a silenced pistol while exploring the asylum. It's rare that you find yourself in a position where you need to use it, but some situations can be solved with force**







manifest in other ways, too: in one puzzle, he can recall an access code to a door by finding pictures of himself at various ages around the office. And, as the player observes the world and tries to make sense of it, so too does Black through a darkly comic script that does a particularly good job of framing his predicament in a naturalistic way.

"We really wanted to make a story-driven game," Pazdur says, "and the original idea came to me when I watched The Butterfly Effect in 2005. It's about a guy who fails at something, and so he's replaying his life trying to fix it, and then when he creates new problems he has to again go back and [take another run at it]. I wanted to create a story that doesn't just make you follow these loops linearly one after the other, but allows you to play with them and shows you different alternatives, and gives you the feeling that you are shaping them somehow."

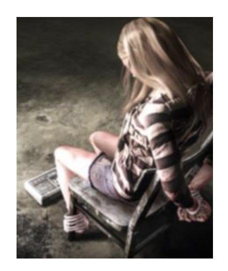
How you approach each memory can change its outcome, and the options that are available to you throughout. If you try to recreate Black's original actions – which, for the most part, means stealthily sneaking past enemies, and solving puzzles to proceed – then you'll have a better chance of gathering all the evidence you need to start making sense of your past. You'll also please the architect of your so-called treatment, the shadowy doctor who talks you through your ordeal. One example sees our path blocked by a scalding jet of steam. Experimenting with a collection of valves will eventually see the way become clear, but you could just save time and shoot the padlock off the gate next to it. This irritates your tormentor, and he will become less patient with you. Continue to defy him, and he'll threaten to stop being nice.

It's a little awkward, then, to discover that the less-favoured brute-force option presented by the experimental Corner Gun, which you steal during an early mission, is such an enormously satisfying one. The weapon is a powerful tool, allowing you to stay in cover while surveying for threats, and line up headshots unnoticed. You can bend it around corners, or over the top of low cover, then watch as enemies shatter in slow motion with each kill. It's also put to good use in some puzzles – in one outdoor area we scan a discrepancy in a wall to reveal a gap, then use the Corner Gun to shoot the padlock off a door before sneaking through into the next courtyard. After avoiding the attention of the guards and reaching the other side, our disembodied doctor praises us for our quiet, clean effort. The resultant flurry of pride is followed by a pang of disappointment that we weren't more rebellious, and so the enemies in the following room suffer the consequences amid a hail of well-aimed bullets.

However you tackle a memory, there's always the option to replay it via a 'filing cabinet' for evidence and memories. This hub area is a plain office room whose ceiling cascades into a tangle of synapses above you. Each memory has a cork board on the wall, and all the evidence you've gathered from it can be reexamined. Coloured string draws links between them and provides hints as to where missing evidence might be located, while a percentage marker at the bottom shows how much you've discovered. Some evidence is only accessible if you make certain decisions along the way, but the cause of each branching path won't necessarily be obvious. "If you're flying somewhere, and you choose one flight or the other, it may have ramifications for you but not the rest of the world," Pazdur says. "Perhaps you meet the love of your life on one, but not on the other? That's how we've tried to play it with *Get Even*, while still making it feel important."

"I'm not afraid of zombies. I'm afraid someone could do something bad to my kids"

There are many other revelations during our session, but in a game built so firmly around piecing together the situation, they're best left for players to discover themselves. But in its confident assimilation of aspects from a multitude of genres, and a tightly curled central mystery that only seems to pose more questions in response to each one answered, it's clear this esoteric vision is quite capable of sustaining a great deal more than an hour-long proof of concept. ■



Audio hook

Get Even's audio design stands out immediately, and composer and sound designer Olivier Deriviere has used the time since we previously saw the game to further refine this aspect. Now pulsing bass notes descend in parallel with your own descent into a building. Black's panicked breath is folded into music during a firefight so that the sense of danger is unrelenting, even when hidden in cover. And one sequence – during which you must make your way through a portion of the asylum while a crazed inmate leads a chorus of other patients banging on doors and chanting, "The party, the party, the party…" – is so memorable we wouldn't be surprised if it joined *Portal*'s cake in the hall of videogame memes.



THIMBLEWEED PARK

The creators of Maniac Mansion return to the scene of their crimes

Developer/publisher	Terrible Toybox
Format	PC, PS4, Xbox One
Origin	US
Release	2017



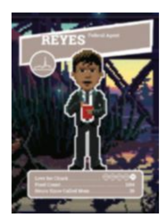
Agent Ray and Agent Reyes just might be based on another fictional FBI duo, and their relationship looks set to be just as fractious ▶



THIMBLEWEED PARK











Just a small selection of a fat deck of trading cards, which reveals an extensive cast. These five are the game's protagonists – you can switch between them throughout

Ron Gilbert, the famed videogame designer behind *Maniac Mansion* and *The Secret Of Monkey Island*, is in an apologetic mood. "I don't think we did a very good job of setting expectations in the classic adventure games," he tells us. "We kind of gave players a lot of vague instructions and expected you to go and figure it out on your own." It's a legacy he's keen to address in *Thimbleweed Park*, the Kickstarted spiritual successor to *Maniac Mansion*.

"This has been a slow evolution of adventure game design for me, going all the way back to *Maniac Mansion*," he continues. "That was a game filled with dead ends and weird arbitrary deaths that I would, of course, never do now. *Monkey Island* got rid of death and the arbitrariness of a lot of the puzzles, so that felt like a big advance. And when I left Lucasfilm I started Humongous Entertainment, which built adventure games for kids. Kids are a very interesting audience to design adventure games for – they have a very short attention span. You need to really keep them engaged and make sure that they're very clear about what they need to be doing – which is different to *telling* them what they need to do."

> ***"I want to communicate that this is all of the wonderful things about point-and-click"***

To that end, Terrible Toybox is aiming to streamline as much of the puzzle-solving process as possible, without ever leading by the hand. There's an easy mode that will take the complexity out of certain puzzles – one puzzle in hard mode, for example, requires you to find and empty a bottle, figure out how to make ink, and then fill it in order to top up a printer; in easy mode, the full bottle is waiting there for you. And in a particularly nice touch, each of the five playable characters carries a personalised notebook that contains a checklist of things to do for each section of the game, which should ensure that you always know where to focus your efforts.

"Adventure games kind of have this stigma attached to them," Gilbert says. "It probably came from a lot of the games in the early '90s – that was the dark age of a lot of point-and-clicks in some ways. It's probably my number-one worry with this game – I want to communicate to people that this is all of the wonderful things about point-and-click adventures, without all the stupid things about them."

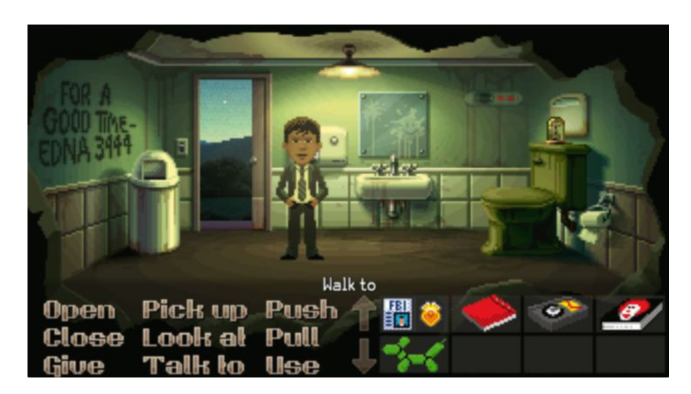
Within that concern lies Gilbert's larger ambition for *Thimbleweed Park*: to somehow recapture the inscrutable charm of early adventures. "We didn't want to make a retro point-and-click game," he explains. "We wanted to make a retro point-and-click game that was like you *remembered* those old games. I don't know what that charm was, and we're really just trying to figure it out. I think we've done it. Part of that was just updating the graphics: we wanted to do 8bit art, but without all the technical limitations of 8bit art. But if I really think about *Monkey Island* or *Maniac Mansion* or *Loom*, or any of those games, there's one thing I think they did a really good job of, and that's creating a sense of place. In *Maniac Mansion* you really felt like you were exploring this weird house. And *Monkey Island* was this whole pirate world, and after a while you really felt like it was a real world that you were walking around. I've played some recent point-and-click games and I'll be walking around the police station or something, and I'll walk out of the door and I'm teleported to some other place. I never get a chance to really explore the world."

From the small section of *Thimbleweed Park* in our demo, which takes in a riverbed, a highway, a couple of streets from the main town, an expansive mansion, and an atmospheric overlook that shows off a view of the game world, it's clear that Terrible Toybox has already succeeded at building a characterful, enigmatic environment that begs for deeper exploration. And it's all made more vivid by realtime lighting, a sprawling cast of imaginatively bizarre individuals, and – perhaps most importantly of all – a script stuffed with some cracking gags. We're keen to find out whether it can recapture the spirit of a much-cherished genre without tripping on any of its more irritating foibles, but we're charmed by its approach already. ■

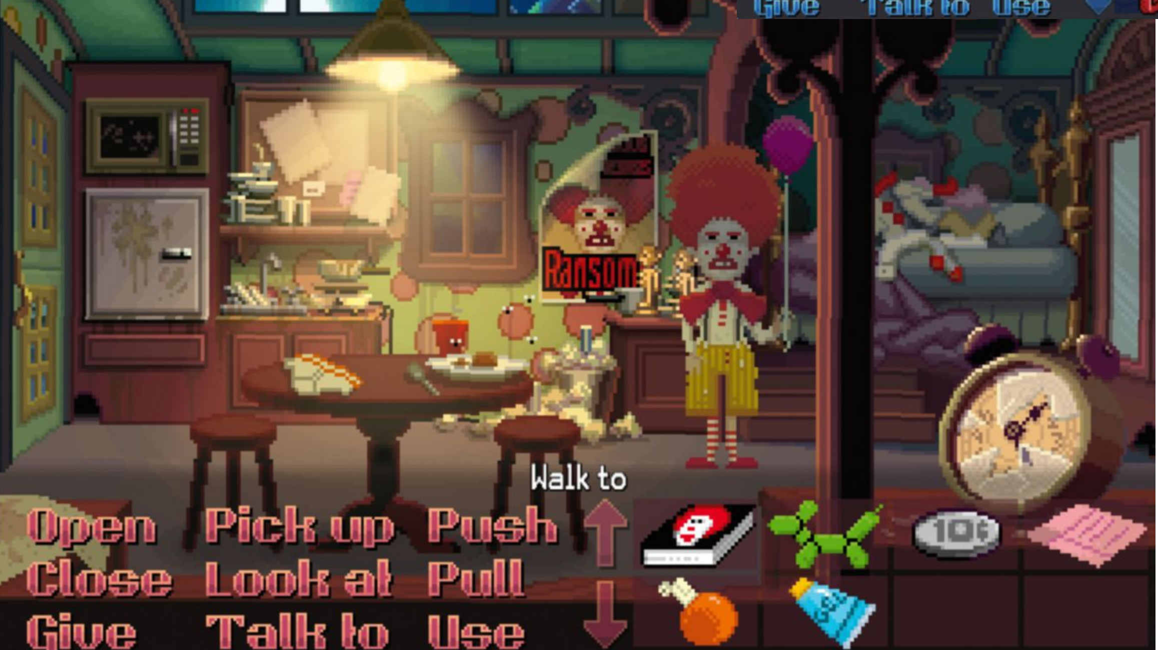


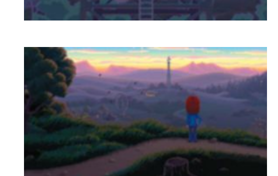
Falling into place

Ron Gilbert has experimented with combining the core of point-and-click games with other genres via *DeathSpank* and *The Cave*, but *Thimbleweed Park* represents his purest adventure in decades. "With *The Cave* and *Deathspank* there was a lot of figuring out what combining those genres meant," Gilbert says. "With *Thimbleweed Park* I knew I just had to design a point-and-click game, and not have to marry anything else to it. It was freeing. When I first started building the puzzle dependency chart for this game, it was very liberating knowing that all I had to do was just design *really good* puzzles."



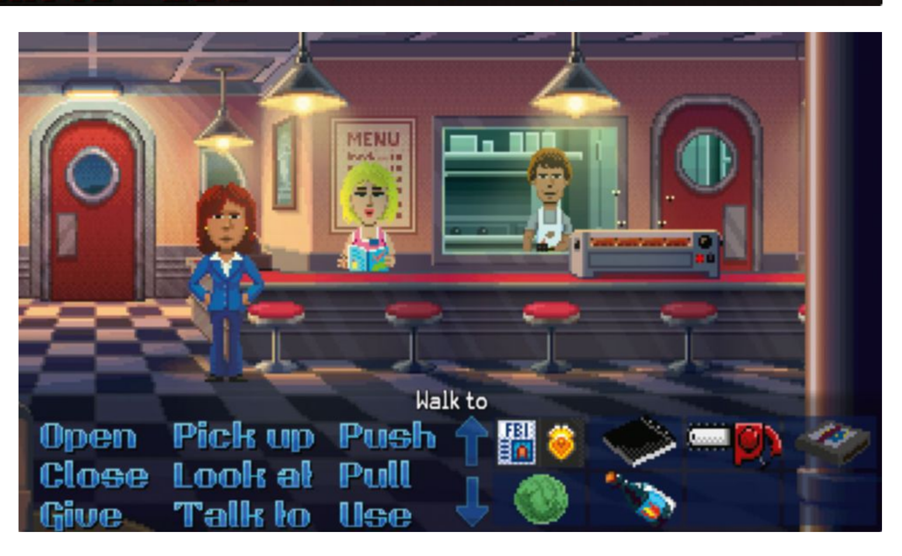






TOP Ray is one of two federal agents sent to investigate the discovery of a body. The pair have been sent separately, however, and are immediately suspicious of each other's motives. ABOVE There are some wonderful views to enjoy in *Thimbleweed Park*, and every area is interconnected. MAIN Ransome the clown has been cursed, and is unable to remove his makeup

TOP *Thimbleweed Park*'s realtime lighting bathes the game's world in sickly greens and neon pinks. RIGHT The game's 8bit art style is immediately evocative of classic point-and-clicks, but the interface is slicker than it appears





Developer/publisher Funcom
Format PC
Origin Norway
Release Out now (Early Access)



CONAN EXILES

Rule your thralls! Lay waste to enemies! Also, chop down trees

There's an abiding sense of familiarity to *Conan Exiles*. On the one hand, it's a return to the lands of Hyboria for developer Funcom, which originally built out Robert E Howard's low-fantasy world of barbarians, breasts and beasts for its 2008 MMOG *Age Of Conan*. It's not exactly the same world – *Exiles* is set in a new location, the Exiled Lands, a land of desert and oases encircled by a boundary called the Cursewall. But it's still a place of high peaks and monumental stone constructions, fit for rippling pecs and flashing swords.

On the other hand, there is a lot here that feels familiar, with remarkable similarities to *Ark: Survival Evolved*. It might lack dinosaurs to tame, farm and ride, but the resource gathering, crafting and building that underpins it, along with health, hunger and thirst management, are functionally identical. And then there's the framing of the world: in *Ark* your character is fitted with a strange device implanted in one arm, while in *Exiles* your character wears a mysterious bracelet which, should you attempt to cross the Cursewall, will kill you.

Other players are usually more than happy to murder you, especially when you're naked

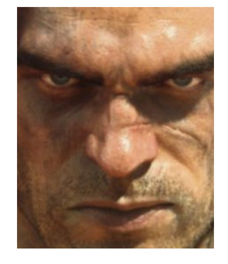
Sure, *Exiles* hasn't only looked at *Ark*. It's also taken on *Rust*'s impish love of nudity with some gusto. If your server allows it, you start the game entirely naked, and you're bound to come across both NPCs and other players in various states of exposure.

Which isn't to suggest these features aren't a good fit. This is a game about building a fortress, establishing a clan by collecting thralls, creating grand shrines to your savage gods, and warring against all comers: all healthy pursuits for any smouldering brute. And you'll start constructing soon after starting the game. By placing foundations on the ground you'll build your first shelter out of modular walls and ceiling sections, affording some security for your valuables and a safe spawnpoint. Later, you'll access pillars and steps that allow you to build upwards and even on top of the monumental buildings scattered throughout the land.

But the moment-to-moment reality of *Exiles* is feeling less a proud barbarian than a grubbing peasant as you run around gathering branches, building tools, and labouring at rocks, trees and shrubs to mass the vast quantities of stone, wood and fibre that every construction needs. Then there's the grinding for XP: you'll have to attain levels to unlock the crafting recipes for more sophisticated items, and after the initial flurry of unlocks for rough clothes, a fragile flint sword and other basics, they slow down suddenly.

It's also a dangerous game: other players are usually more than happy to murder you, especially when you're naked and vulnerable after a respawn, and the endless search for materials, water and food is always there to push you into exploring new areas. NPCs and creatures are initially also a threat, but once armed with a sword and some clothes become quotidian sources of meat and hide. Since there's currently little more to combat than hitting foes enough times that they die, NPCs expose a distinct lack of finesse in the combat of the initial Early Access release.

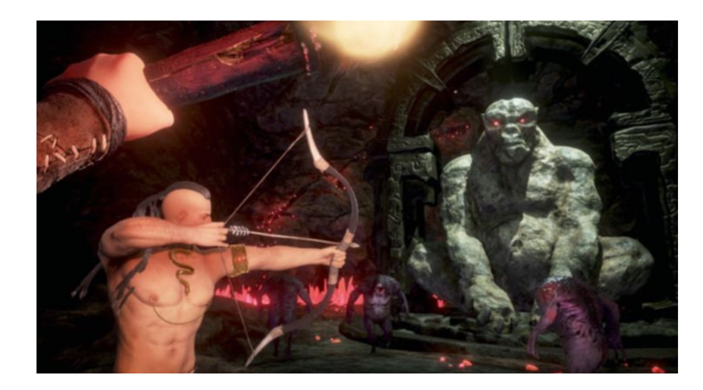
The power fantasy is promised to come later in the game, with access to grand tier-three constructions, armour-crafting and metalworking benches staffed by your slaves, and shrines. The latter provide special items specific to the game's four different gods and eventually provide access to an avatar, a towering figure you can summon and control to wage a brief period of cathartic macro-scale destruction on your enemies. The big question is whether they'll feel worth all the work you've put into attaining them. ■



Land scoping

Your journey into the Exiled Lands starts with you crucified in a desert for randomly generated crimes (including bad use of grammar, decapitation of a priest, and freeing slaves). You suddenly find yourself freed and follow a path into lush riverlands, where you'll find wood, fibre and stone in ample supply, along with other players of similarly low level. Once you're able to craft better items, you'll need to start travelling outwards and into more barren lands for coal and iron. On the way you'll encounter colossal stone statues and deserted castles, as well as caves to explore. They're eye-catching monuments, and vital to navigating a land that would otherwise be less than memorable.

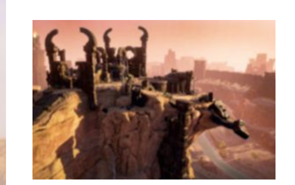








TOP Monuments in the desert may house hidden areas that are usually full of monsters. RIGHT Weaponry, armour and building units are split into tiers: the higher the tier, the more effective it is

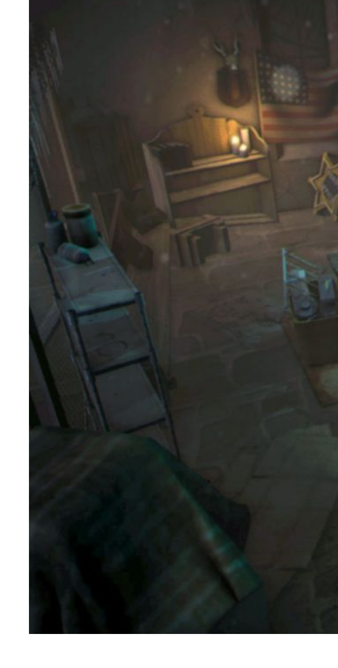




TOP Hunting is necessary for the food and hides you'll acquire for continuing to hack at your kill's corpse. ABOVE Most of the sights to be found in the Exiled Lands are vast; establish your fortress in or on one and you'll have claimed a magnificent landmark. MAIN Different servers will have different player population sizes, up to 64, and rules, such as the rate at which XP and other stats rise

Developer
Mojo Bones
Publisher
Bandai Namco
Format PC, PS4, Xbox One
Origin UK
Release April 12







Ako-Light follows you around whenever you venture outside, providing a torch, a radar and a modest inventory. You have to consider the device's battery, however, as if it runs flat you'll be left with only basic navigation and no light

IMPACT WINTER

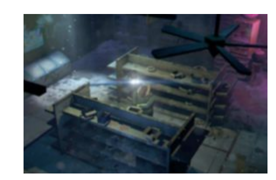
Mojo Bones feels the chill as it reimagines the survival genre

The park, or at least what's left of it, is a surreal sight buried under 50 feet of snow. Now hollowed out into a frozen cave, it has become a network of chilly, gloomy chambers in which we're searching for components that can be used to build a basic heater for the abandoned church that we, and four other survivors, have commandeered as a shelter. Mid-search we happen across an injured man who begs us to bring him medical supplies. We agree, triggering a new event, but our inventory is stuffed full of breeze blocks, metal pipes and scrap metal. Deep down, we know we're not coming back. On the arduous return trip to the church a notification pops up to tell us that the event can no longer be completed, and we know that the man no longer needs our help.

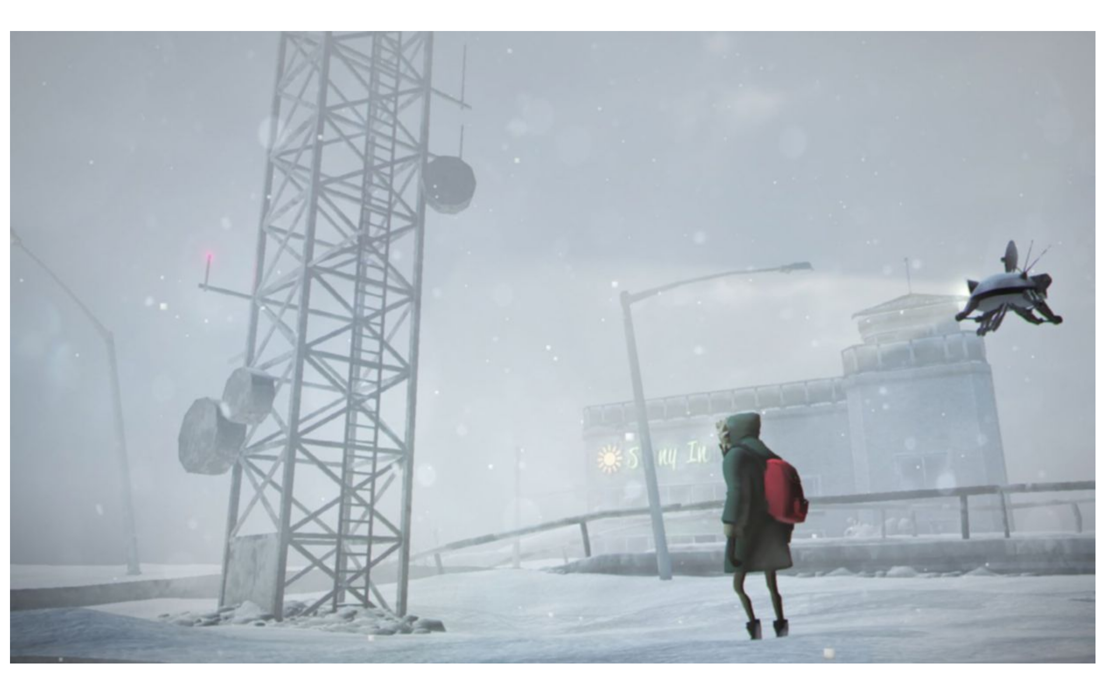
Impact Winter's post-apocalyptic world is severe and unforgiving – a vast, potentially deadly tundra in which opportunities, items and other survivors appear randomly while you do your best to keep your five-strong party alive for the 30 days it will take for help to arrive. But while the harsh winter, base management, and focus on surviving until you're rescued evokes comparisons with 11 bit studios' *This War Of Mine*, *Impact Winter* offers a profoundly different experience.

"We're fans of the game, but stylistically it's very different to *Impact Winter*," lead designer **Stu Ryall** tells us. "But the big thing we're trying to convey with our game is this idea of the team being automated. Your team will sleep when they're tired, and they'll get food when supplies are low. You can do interesting things with that because we have morale in the game and characters can become depressed – they can argue with each other randomly based on their moods, and you can





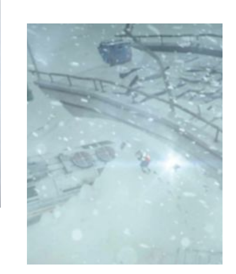
ABOVE **Interiors are peaceful, melancholy spaces whose emptiness underscores your vulnerability within this asteroid-devastated world.** LEFT **Supplies are semi-randomly distributed each time you start the game, though you'll always be able to find food in supermarkets and medicine in pharmacies**





LEFT **As you improve the church it will become more cosy and better defended, raising the efficiency and morale of your team**
BELOW **Weather is dynamic. Whiteouts can separate you from Ako-Light, meaning you'll have to navigate home using only landmarks and previously placed markers**





issue roles to the characters, which they'll carry out, but you're not directly in control of them. It poses different questions about leadership, rather than just letting you take control of other characters and do what you want. The automation makes it feel very different to what people have seen before."

The list of roles you can assign is extensive, but must be unlocked as you gain experience (unlocked roles will remain available in each subsequent playthrough, allowing you to be more efficient the next time around). You can set up automated systems – one person, for example, could be asked to keep the fire burning, while another goes out to collect fuel, and one more carts fuel from the storage area to the pyre – or use more focused roles such as the peacekeeper, which will prevent any productivity-sapping arguments even if morale is low, or the inventor, which sees a party member study books that allow you to craft new items.

Each of your companions also has their own specialisms. Maggie is the mechanic of the group, and is in charge of upgrading the church's interior and defensive capabilities. Blaine, an ex-cop, knows a thing or two about survival and brings essential knowledge about weaponry and animal trapping, as well as the ability to set up temporary campsites away from the church. Wendy is a dab hand with raw ingredients, and can whip up nutritious meals for everyone (though you must ration out the available portions). Finally, Christophe is a rather hackneyed technical whizz whose passion is working on and upgrading Ako-Light, a floating robot which accompanies you on your trips into The Void, offering storage capacity, a radar and digging capabilities.

At the beginning of each game you can select a particular character path, each of which will skew the focus of your session – picking Maggie, for example, will make it more about upgrading the church to make it safe and homely, while a Blaine-focused playthrough will give you access to more hunting equipment and parts of the map you might otherwise not have been able to reach.

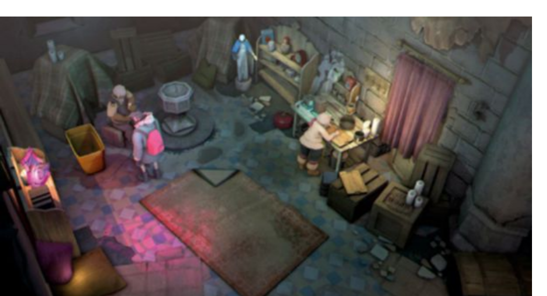
"You see it and think survival, but even the inventory system is a nod to Resident Evil 4"

Everything you do rewards you with survival points, which in turn reduce the countdown to rescue – a setup that inverts the traditional survival-genre staples, and the inspiration for which came from an unlikely place. "A lot of games do survival really well in terms of trying to eke out that extra day, but for us it was the idea of you've got 30 days to survive, and the things that you do in the world bringing that timer down," Ryall says. "It's also our love of eastern games, especially Japanese RPGs – the idea that you're earning experience and levelling up, and that's bringing your timer down. And I'm a big fan of *Dead Rising*, which has a timer, of course. So there are a lot of influences. You see it and you immediately think survival, but even the inventory system is a little nod to *Resident Evil 4*. There are all these bits and pieces from all the games we're influenced by, and that's why we're calling it a survival adventure." ■

Cold comfort

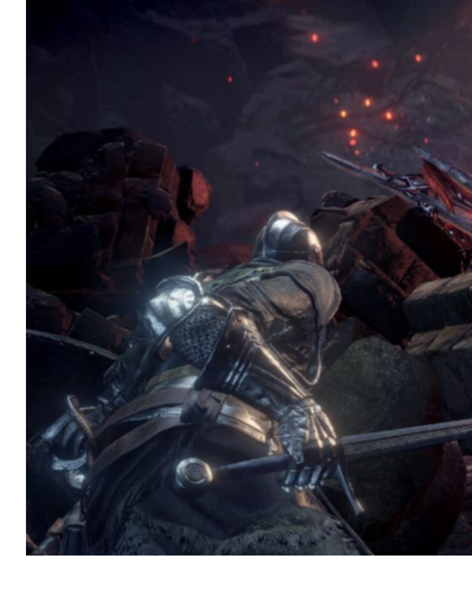
A post-apocalyptic winter might be a rather good fit for a videogame, but it raises its own artistic challenges. How do you go about designing an engaging, navigable world when your palette predominantly consists of various shades of white? "You end up with this library of go-to things like the tops of buildings, pylons, highways, and larger mobile structures like crash-landed jets," art director **Mark Norman** says. "There was something I liked about that blank canvas – it was stark and foreboding, like you were very alone in a very big world. And then we've got this richer, darker underworld, and the contrast between the two is quite appealing – it's almost like two games in one."

Each member of your team has their own workstation in which to craft their specific speciality, whether that be food, tools or simply upgrading and tinkering with Ako-Light's functions





Publisher Bandai Namco
Developer FromSoftware
Format PC,PS4, Xbox One
Origin Japan
Release March 28





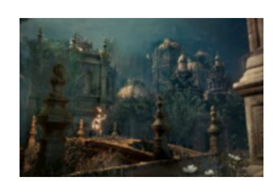
DARK SOULS III: THE RINGED CITY

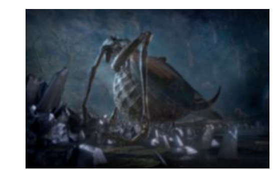
FromSoftware raises the stakes for Dark Souls' endgame

We can't help but feel a little sombre as we take our first steps into *The Ringed City*, the second and final expansion for *Dark Souls III*. This is, if Miyazaki is to be believed, the last time we'll set out into new territory in the *Souls* series as we know it. The opening location for this final adventure is The Dreg Heap, which appears to be in the fallen city seen in *Dark Souls III*'s concluding area, Kiln Of The First Flame, and sits above the titular Ringed City. Swathes of a once-towering city now sit at 45 degrees to the rest of the world amid a sea of ash, crumbling towers jutting out like porcupine spines from their dislocated base. It's a fitting visual analogy for what is to follow, as FromSoftware leads us down into the depths of this new area.

But before we take the plunge there's a kindly old pilgrim to chat to, who offers us a little local history, some apparently genuine concern for our wellbeing, and the opportunity to buy or sell items. Given we have no souls to hand, we elect to leap down the first of several severe ledges instead – there's no way back to that opening bonfire without a Homeward Bone now. The precarious pathway leads to a large, suspiciously empty area. As soon we reach it, the floor erupts as a dozen skeletal torsos emerge from the ground and overwhelm us while staff-wielding (and leg-owning) skeletons pummel us with blasts of some kind of undead magic. It seems that FromSoftware isn't pulling its punches.

A second, more cautious attempt sees us clear the area without too much bother, and after ascending a curving staircase into a ruined portion of high wall, we encounter another new monstrosity. A bulbous, void-

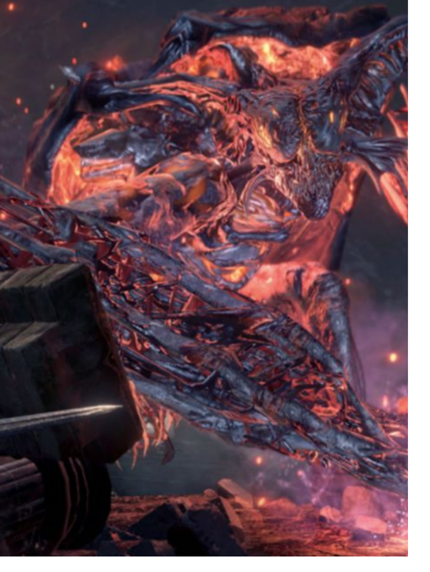


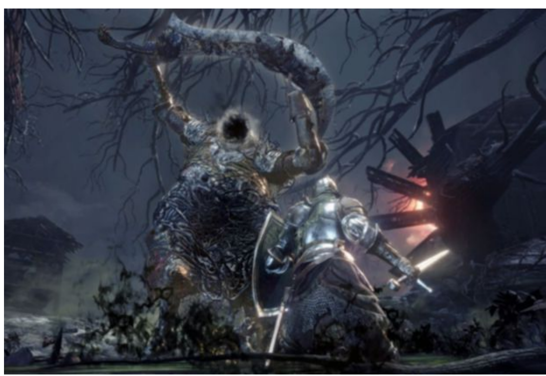


ABOVE **Ruins from various time periods have accumulated at the farthest reaches of the world, resulting in strata of *Dark Souls* history. Locusts feast on the remnants**

The Dreg Heap is in a sorry state, but still majestic in its own ruined way. From this lofty starting point, however, the path forward descends farther and farther into the dangerous ruins







LEFT **This addled mass of roots and armour is quick on its feet and capable of delivering fast strings of attacks using its sword and, through jumping, its expansive backside**



TOP LEFT **This hulking boss has a dispiritingly long reach, can fly, fire a beam of flame from its mouth, and send an shattering wave of destruction along the ground. Oh, and did we mention that it comes as a pair?** ABOVE **We don't get the opportunity to try this colossal shield – assembled from a pair of wooden doors – during our demo, but it inspires memories of *Dark Souls II*'s greatshields of Reeve and Orma. Other new blocking options here are more conventional**

faced knight wielding a giant scimitar immediately takes a run at us as we raise our shield, looking for the first tells. It's quicker than its size would suggest, and an initial flurry of fast attacks catches us off guard, necessitating a strategic retreat while the stamina bar ticks back up. The hulking creature has a habit of leaving its back exposed, however, and after a long fight, we reduce its health bar to zero.

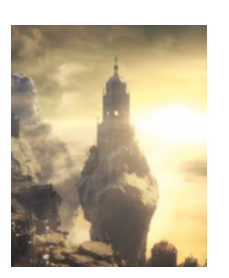
So far, so familiar. But anyone who's spent any time with a *Souls* game knows that a growing sense of confidence inevitably means you're being set up for a fall. We just didn't think it would be quite as literal as this. After wandering about for a few minutes and failing to find a path forward, we decide to gather our thoughts and take in the view from the remains of a fallen bridge. As soon as we step on to it, the stone structure collapses and we plummet a huge distance – cursing the game and absolutely assured of our imminent death – before crashing through the stained-glass window of an upended tower and landing softly in the now-horizontal interior. Well played, Miyazaki.

Another assortment of skeletons immediately emerges to greet us, and we discover that staff-wielding variants are capable of summoning a shadowy beast that flies through the air and saps a huge chunk of health if it isn't avoided. But that's nothing compared to what waits around the corner. The looming, winged skeletal creature from the reveal trailer hangs in the air, screeching as it sends criss-crossing lightning bolts our way. We roll for cover behind lumps of masonry and wait for it to turn its back before dashing to the next tiny area of relative safety, eventually making it down to a building that provides a greater amount of cover.

Beyond is a doorway into a wrecked church where two Lothric Knights stand at the altar – one kneeling, the other blessing him with an unfamiliar-looking staff. On noticing our arrival, the kneeling knight gets up and follows us back outside into what remains of a courtyard – thankfully, the second knight holds off for a while before joining the fight – where we discover that the winged creature's bolts can be used to damage both of them with a little kiting.

> ***As we step on to it, the stone structure collapses and we plummet a huge distance***

Beyond this point, the path splits. One section leads down beneath the ruins, while another area containing a second demon requires an even bigger leap of faith than our first. After that a poisonous swamp awaits, filled with curse-giving enemies and enormous stretches of open ground beneath the lightning-hurling monster from earlier. FromSoftware ramps up the challenge and intensity quickly, and clearly has no intention of backing down for this final outing. We're curious to see if it can match the exceptional level design of *Dark Souls II*'s best DLC, especially given that each bonfire we reach is cut off from the one before by a huge drop, but it feels like *Souls* will be bowing out with one of the series' greatest challenges. ■



Rings hollow

In one section of The Dreg Heap we enter a building in which each step seems to trigger more of the staff-holding and legless skeletons. It's not until we're several rooms deep that we realise that everything we kill in this area respawns indefinitely, and soon after that it transpires that path was a dead end, leading to a chest containing a ring. Rather than fight our way out, we resort to Katamari tactics and roll our way back to freedom as the creatures now filling each room swipe at us and fling dark spells in our direction.

MINIT

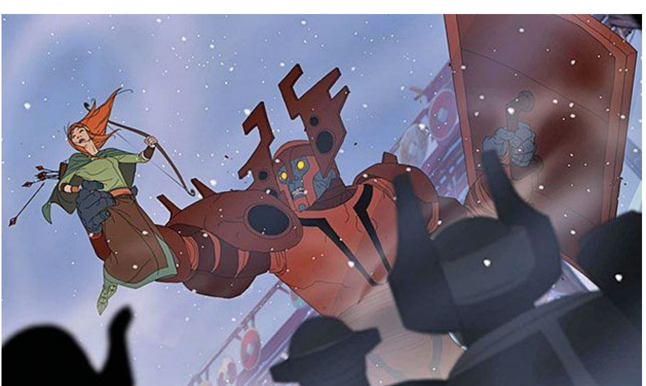
Developer Various **Publisher** Devolver Digital **Format** PC **Origin** Netherlands **Release** 2017



Life comes at you fast in this striking monochromatic adventure from a supergroup of developers, including Kitty Calis (Guerrilla), Jan Willem Nijman (Vlambeer) and Dominik Johann (Crows Crows Crows). *Minit*'s diminutive hero has been struck by a curse that sees him collapse at the end of the day, each of which lasts just 60 seconds. It's a bracing twist on the Roguelike template, not least since you'll spend your short days doing more than simply exploring dungeons and battling enemies: there are NPCs to converse with, plants to water, and a variety of secrets to uncover as you try to lift the hex.

THE BANNER SAGA 3

Developer Stoic **Publisher** Versus Evil **Format** PC, PS4, Xbox One **Origin** Canada **Release** 2018



Comfortably surpassing its crowdfunding target within a matter of days, the concluding chapter of Stoic's grimly gripping Norse chronicle has a stretch goal that presents an unlikely alliance. Three Dredge warriors – the stoneclad race you've been fending off throughout the first two episodes – can be recruited to your ranks. And you might well need their help: your caravan's journey looks set to end with a battle against mythical serpent Jörmungandr.

DIRT 4

Developer/publisher Codemasters
Format PC, PS4, Xbox One **Origin** UK **Release** June



The excellent *Dirt Rally* returns with a new numbered entry whose signature feature is a track creator that uses procedural generation to create courses based on player-set parameters. *Rally*'s shift back towards hard-edged authenticity, meanwhile, is matched by presentation that places grit ahead of glitz.

SHOVEL KNIGHT: TREASURE TROVE

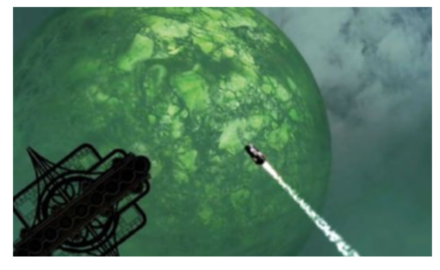
Developer/publisher Yacht Club Games
Format PC, PS4, Switch, Xbox One **Origin** US **Release** Spring



The popular retro-styled platformer is headed for Switch in a package alongside its two additional campaigns: the already-released *Plague Of Shadows* and the forthcoming *Specter Of Torment*, which will reach other platforms later this spring. The three campaigns will be available to buy separately.

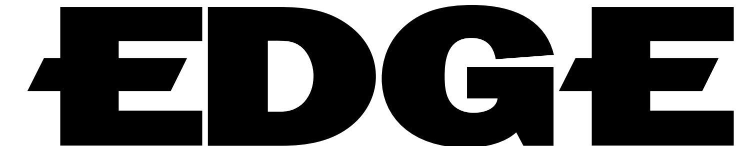
SUNLESS SKIES

Developer/publisher Failbetter Games
Format PC **Origin** UK **Release** 2018



Failbetter might need a new name: the follow-up to top-down survival RPG *Sunless Sea* raced past its Kickstarter goal within hours. Trading a steam ship for an airborne locomotive, *Skies* isn't promising huge mechanical changes, but it's proof that a richly crafted setting is more than enough to compel a revisit.

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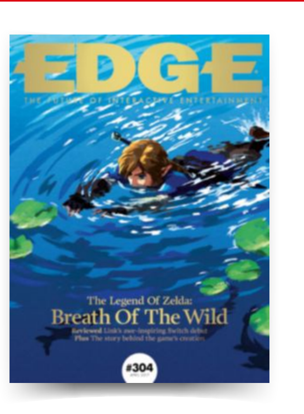




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BOTW

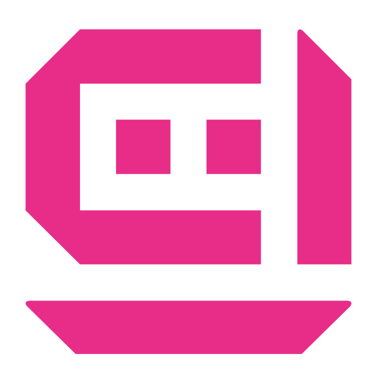
BOTOWI

Breath Of The Wild director Hidemaro Fujibayashi tells us how Link embraced the open world

By Chris Schilling


R N
B E
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Under ordinary circumstances, **Hidemaro Fujibayashi** (left) could be considered something of an industry veteran. He has, after all, been making games since 1995, when he joined Capcom – and he's been a level designer, after a fashion, for even longer, having previously been responsible for planning the layouts of haunted houses for theme parks in Japan. Indeed, his ties to *The Legend Of Zelda* alone stretch back 16 years, to the two *Oracle* games for Game Boy Color.

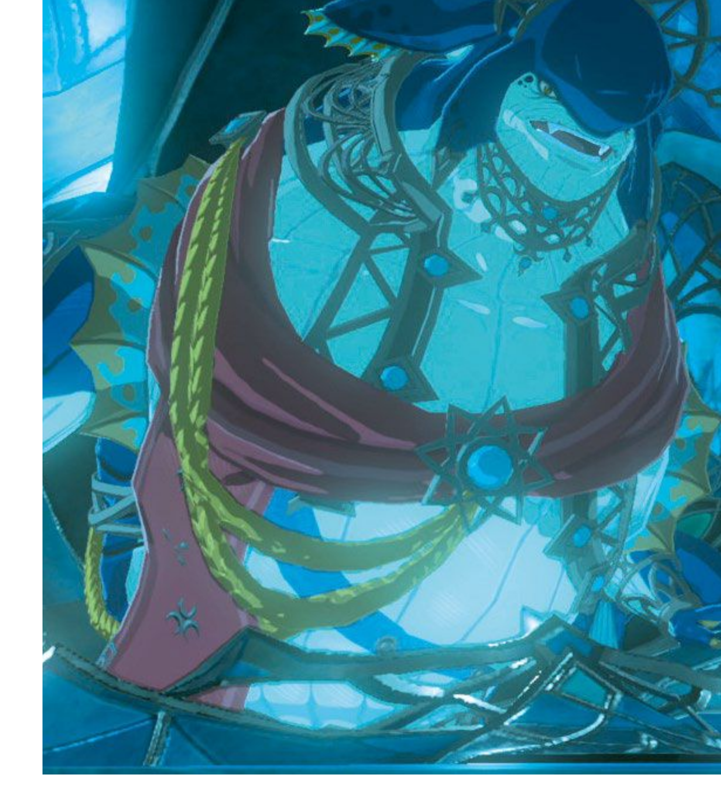
However, Nintendo is no ordinary company, and so it is that Fujibayashi finds himself thrust into the spotlight after more than two decades in the wings, as the old guard of Miyamoto, Aonuma, Tezuka et al take a step back. Alongside the likes of Yoshiaki Koizumi, Shinya Takahashi and *Splatoon* producer Hisashi Nogami, Fujibayashi represents the new face of Nintendo – even if 'new' is a bit of a stretch for such long-serving employees.

A relatively sprightly 45 years of age, the *Breath Of The Wild* director's first entanglement with *Zelda* came during development of *Oracle Of Ages/Seasons*, where he was responsible for collating game concepts from Capcom's team and reporting back to Miyamoto. His organisational skills must have impressed his superiors, since he was appointed the role of director and co-writer. Fujibayashi conceived the password system that connected the two games for a special ending.

Who better than a man responsible for a link between Links to helm a new *Zelda* game designed both to span two hardware generations and to bridge the gap between established ideas and brave new horizons? And yet Fujibayashi says it took some time to find a fresh point of focus for *Breath Of The Wild*. "It didn't come to me right away as a fully formed idea," he recalls. "For a long time, I went from idea to idea before I finally reached what I think are the very roots of *Breath Of The Wild*'s gameplay: the idea of cliff climbing and paragliding back down, the keyword 'survival', and the idea of 'creativity of combination' whereby players make use of things that happen when their actions interact with objects placed on the map – for example, lighting wood with fire to create a bonfire. It was this root gameplay that I then submitted."

"I went from idea to idea before I reached the very roots of Breath Of The Wild"

For Fujibayashi, *Zelda* is, first and foremost, a puzzle game. Whether it's one of the many shrines (self-contained miniature dungeons, essentially) scattered throughout the land, or even a cluster of Bokoblins blocking your path, *Breath Of The Wild*, like previous entries, is designed around a series of situations that require the player to come up with a hypothesis and then test it out. That has, he says, been central to the appeal of *Zelda* since the beginning – back when he was part of its audience rather than its creative team. "The look and feel of the game has ▶





“I don’t think the core gameplay has changed at all compared to 30 years ago”

changed with the times, [but] I don’t think the core gameplay of the series has changed at all compared to that of 30 years ago,” he explains. “I feel that’s because even though the puzzle-solving element of the series changes with the times in how exactly players interact with it, the fun of it – the fun I experienced for the first time myself as a child – is still there in more recent *Zelda* titles, completely unchanged.”

So long as that core – or ‘rule’, as he calls it – is intact, Fujibayashi believes, then there are no limits to what can surround it. He is, it’s fair to say, an ideas man – keen to stuff as many as he possibly can into each new entry for which he’s responsible. “Whenever we get a new piece of hardware, or a new feature, or a new development environment, I just want to tell people about the ideas I have for getting that same feeling of fun I felt way back into a game, but in a new way,” he says. “What I’ve learned from working on *Zelda* games is that you will never run out of ideas if you ask yourself what you can mix together with this rule.” ▶



LEFT **Main quests take you to tribal elders, such as the Zora's King Dorephan.** BELOW **Horses can be adorned with decorative accoutrements – but only at one of Hyrule's stables.** MAIN **Light clothing is essential for keeping the desert sun at bay**



WEAR IT'S AT

Link has been able to increase his health, stamina and/or magic gauges throughout the series, but *Skyward Sword* introduced a series first: upgradeable gear. Crafting has been significantly expanded in *Breath Of The Wild*, encompassing a *Monster Hunter*-like cooking system that lets you combine ingredients – from food to plants to monster parts – and there are various items of clothing, such as a quilted shirt that protects Link against the cold. Like the open world, these features are designed to give the player a greater feeling of freedom, Fujibayashi explains. "It's up to you how you want to play *Breath Of The Wild*. These systems, such as ability boosting, items and equipment, are there for that purpose. This quality also means that different people might experience the game very differently. There will be players who might gather lots of food and potions to recover hearts and stamina, so they can recover from any mistake. Other players might try to overcome difficulty by improving and strengthening their clothing and equipment." In other words, players can exert a degree of control over the challenges they face in accordance with their individual play styles – and Fujibayashi is well aware that will include an audience that would rather raise the difficulty than lower it. "Some may rely on their bow-and-arrow technique and complete the game wearing just underwear!" he says. "*Breath Of The Wild*'s systems make all of these approaches possible."

HERO OF TIME

A game-by-game journey through Hidemaro Fujibayashi's Zelda career



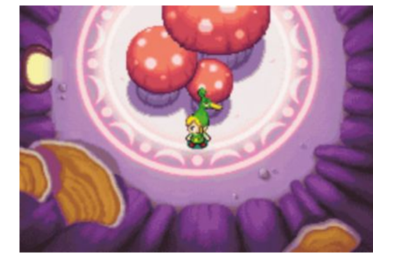
The Legend Of Zelda: Oracle of Ages/ Seasons ***(Game Boy Color, 2001)***

Fujibayashi's first *Zelda* game was developed at Capcom subsidiary Flagship. Initially conceived as a triumvirate – representing the three parts of the Triforce – one game was cancelled, leaving the puzzle-led *Ages* and the more action-focused *Seasons*. The two could be connected to form a single plot, leading to an extended ending.



The Legend Of Zelda: Four Swords ***(Game Boy Advance, 2002)***

From linking games to linking players: Fujibayashi's next project was this multiplayer adventure, which was bundled with the GBA remake of *A Link To The Past*. It blended co-op and competitive play: collaboration was required to progress in its randomised puzzle dungeons, but the player to collect the most rupees would earn an extra reward.



The Legend Of Zelda: The Minish Cap ***(Game Boy Advance, 2004)***

The final Capcom-developed *Zelda* saw Link don the titular garment to shrink down to the size of an insect – as a result, regular enemies such as Chuchus became towering bosses. It also saw a return for *Four Swords* antagonist Vaati, while the Gust Jar – later seen in 3DS multiplayer spinoff *Tri Force Heroes* – made its debut.

In the case of *Breath Of The Wild*, there are lots of new ingredients to stir in, from crafting to cooking, degradable weapons and gear to physics-based conundrums and realistic weather with tangible environmental effects. No sweat for a pioneer such as Fujibayashi, who's overseen Link acting as advocate for a host of Nintendo hardware features, such as the Game Boy Advance Link Cables in *Four Swords*, the DS touchscreen and microphone in *Phantom Hourglass*, and Wii MotionPlus in *Skyward Sword*. In that sense, the series' heroic lead isn't just a mascot for Nintendo, but for its ideas. What is it about Link, we wonder, that makes him so ideally suited to showing off the capabilities of Nintendo hardware?

"Actually, I don't really think of only *Zelda* games being especially appropriate for drawing out the abilities of Nintendo's hardware," Fujibayashi says. "However, solving puzzles is at the root of *Zelda* games, so maybe it is this way simply because the puzzle-solving gameplay allows us to show off new features in a very easy-to-understand way." He follows up with the mildest of spoilers: "In this story Link wakes up at the outset wearing only underwear. I think, as the avatar of the player in this world, he's able to take on all these different roles precisely because we made him as a character so neutral."

If Link is adaptable, the same could be said for a series that has never been content to stay in one place, even as some features have remained constant. *Majora's Mask*, for all its recycled assets, adopted an entirely different structure to its immediate predecessor; *Spirit Tracks*, too, borrowed a control scheme from *Phantom Hourglass*, but approached navigation in its own distinct way. The Fujibayashi-directed *Skyward Sword* left little room to explore outside its dungeons, while its successor's expansive world stretches as far as the eye can see, and beyond. Fujibayashi has his own theory for why *Zelda*, unlike so many of its peers, has been so open to change.

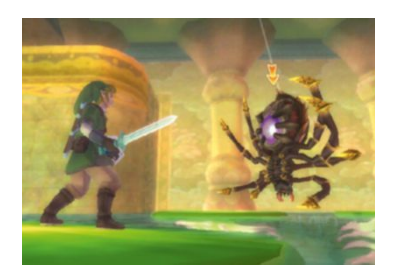
"The history of the *Zelda* series is very long, so I should note that a lot of what I'm about to say ▸

There are lots of new ingredients, from crafting to realistic weather



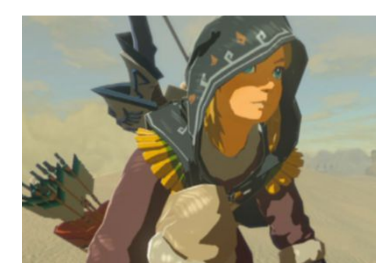
The Legend Of Zelda: Phantom Hourglass
(Nintendo DS, 2007)

After Capcom closed Flagship, Fujibayashi began working for Nintendo. Borrowing the cel-shaded aesthetic (and sailing elements) of *The Wind Waker*, *Phantom Hourglass* featured ingenious stylus controls and a central dungeon, the divisive Temple Of The Ocean King, to which players had to repeatedly return.



The Legend Of Zelda: Skyward Sword
(Wii, 2011)

Fujibayashi's first home-console *Zelda* took five years to make – and the stresses of development pushed him into throwing a sickie so he could write the game's scenario in a day while cloistered at home. Its motion-controlled combat didn't sit well with everyone, though plenty – including us – appreciated its breaks with series tradition.



The Legend Of Zelda: Breath Of The Wild
(Nintendo Switch/Wii U, 2017)

Fujibayashi says that *Breath Of The Wild* was built with the notion of rethinking series conventions, but he hasn't simply gone back to the drawing board. "We're not changing the true nature of *Zelda* games," he says. "We're just changing our approach to it." Discounting *Four Swords Adventures*, it's the first mainline *Zelda* to use auto-saves.

SOFT LAUNCH

Breath Of The Wild **is Nintendo's most ambitious project to date, and the company's own staff required some assistance to get it finished. Around 100 staff from *Xenoblade Chronicles* developer Monolith Soft have worked on it. Marshalling a workforce of that size is no mean feat, particularly when you're making a game with so many variables. But ensuring everyone was on the same page was less of a problem than you might assume, as Fujibayashi explains. "Since this was a rather large-scale project, we were coming up with a lot of ideas for features and gameplay at the same time as we were creating the game," he says. "When doing this it's impossible to avoid some inconsistencies in terms of development decisions and what's actually being made. So at milestones during development, we were sure to have all of the development staff take plenty of time to play the game that had been made so far and understand the problems we had."**

This might sound time-consuming, but Fujibayashi says it became a useful shortcut, ultimately cutting down development time rather than extending it. "By repeating this process, the director just has to define the problem, and the staff working on the game can then easily understand what the issue is, avoiding any differences in key areas in terms of decisions, or the direction we should go. Also, by understanding the game as a whole by playtesting it, our developers were able to understand what the colleague next to them was working on. It's horizontal information sharing. We overcame the boundaries of roles, which often isolates information."

This collaborative approach allowed staff to easily exchange information with colleagues, encouraging ideas to be freely shared and implemented. "It may seem obvious, but this had quite a huge effect on the project," Fujibayashi says. "For example, the enemies in this game really have lots of unique actions. If you throw a bomb, they may kick it or throw it back to you, or they might pick up and use weapons dropped by others. These actions were created by staff working on all kinds of other areas finding things that could be fun and bringing up those ideas."

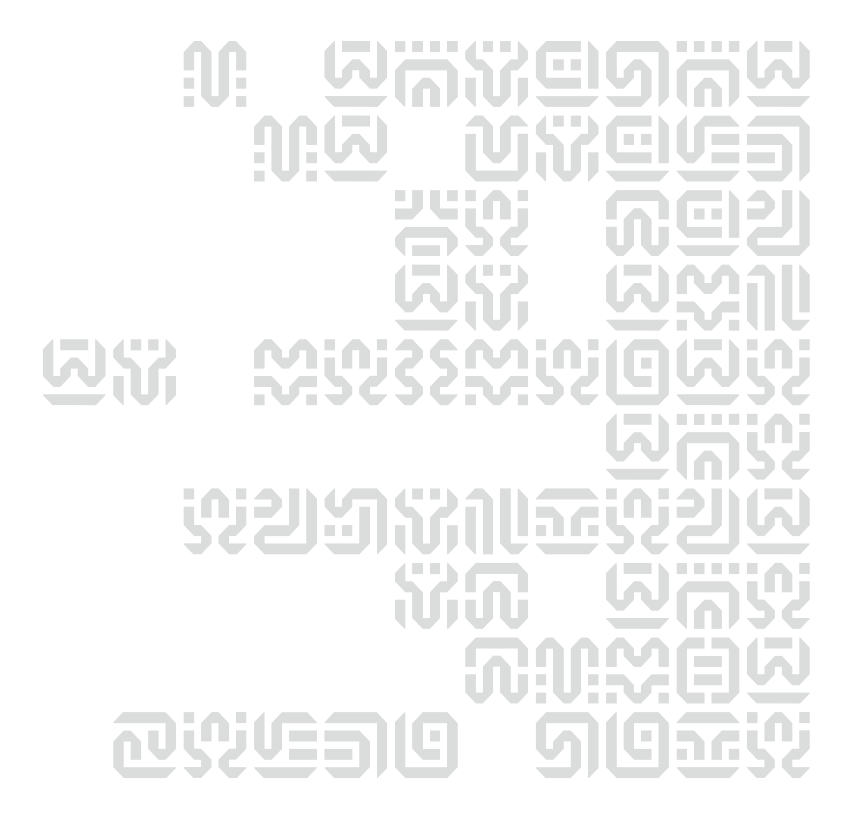




"I feel like we've made the Zelda games to allow players to get one specific sensation"

includes some speculation of my own," he begins, cautiously. "But I think that perhaps it's because throughout the series, even though directors have changed, I feel like we've made the games to allow players to get one specific sensation or experience. A universal experience, a feeling that exists in everyone no matter the time period; something that's not really affected by a difference in views you hold or the culture you come from. There can be a language barrier, but it's not an absolute. Anyone would be excited when they manage to get the ring out in one of those metal-wire puzzles, right? That's the kind of experience I'm talking about. I think it's because the *Zelda* games are built to treasure that feeling that makes it so adaptable."

Exhibit A: tasked with negotiating a frigid river, Link must cut down a tree and push its trunk into the water in order to cross safely. This is just one example of what Fujibayashi calls *Breath Of The Wild*'s "sensory and intuitive" puzzle solving. His team has worked hard to fill the game with such moments.



"I thought it would be fun to try to recreate the enjoyment of the first Zelda game"

Problem solving is inherent to game design, of course: part of Fujibayashi's job over the past decade and a half has been finding inventive ways to use hardware, just as Link must dig into his backpack to find the right kit for his current predicament. What's different this time is that *Breath Of The Wild* is a crossplatform game, built for two distinct formats – and, as such, couldn't realistically be bound to any specific hardware features. Rather than looking back through his own *Zelda*s for inspiration, Fujibayashi opted instead to study one he'd enjoyed as a fan.

"There was no need for us to build the gameplay around a certain special game mechanic," he says. "This heralded a return to our roots. I thought it would be fun not to make the system too complex, and instead try to recreate the entertainment and enjoyment of the first *Zelda* game using our current platforms. When looking into the idea, I realised the original *Zelda* allowed users to freely explore an expansive world; players would search for the dungeon they were after and look for a way to reach it. This was a theme that fit exceptionally well with *Breath Of The Wild*." It's appropriate, really, that for a series whose timeline is so hotly debated, *Zelda*'s future should be so deeply rooted in its past.

Still, the presence of the Sheikah Slate, a multi-faceted tool shaped suspiciously like a Wii U GamePad, is a lasting reminder that *Breath Of The Wild* was originally built around a single piece of hardware. It was spring of 2016 when the decision was made to develop and release the game for Switch, too. Eiji Aonuma has already spoken of the "large extra burden" it placed on the shoulders of the development team: the move from two displays to one enforced a shift in the way the game controlled. Fujibayashi, however, reflects on this unusual situation with great diplomacy. "Of course, we didn't have a huge amount of leeway in terms of time," he recalls. "But as director I wasn't particularly fazed by this. I have a very strong impression that work proceeded without panic under the specific instructions of our producer, Mr Aonuma. Personally, when I started thinking about what kind of features the Nintendo Switch hardware had, I ended up thinking about whether we could add in any new ideas, which looking back on it now was probably not the best thing to be thinking of at the time!"

Fujibayashi's past experience perhaps made for an easier transition than would otherwise have been possible. Having previously directed handheld and home-console *Zelda*s, he now found himself helming a game that would, in its Switch incarnation at least, function as both. The key difference between the two types, he says, is an obvious one: horsepower. "The *Oracle* games and *The Minish Cap* were 2D pixel-art games released on the Game Boy Color and Game Boy Advance. Compared to the Wii, Wii U or Nintendo Switch, graphically they can't even begin to match up – the kinds of animations, the text we can show, the audio, and storage space are definitely not comparable. The most notable difference is simply that we can no longer 'fudge' things when it comes to anything graphical. What we have previously left up to players' imaginations can all now be shown for real, so continuing to use our previous methods of expression would lead to some very odd experiences for players."

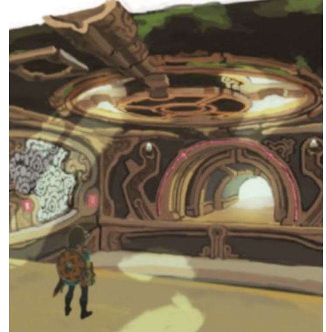
Otherwise, he says, the process is remarkably similar. His approach to crafting the foundational play logic that underpins *Breath Of The Wild* hasn't really changed a great deal since *The Minish Cap*. Rather than elucidate, he says, "It might be more fun for players to see how we maintained a balance [between the two styles] by playing the game and seeing for themselves." ▶

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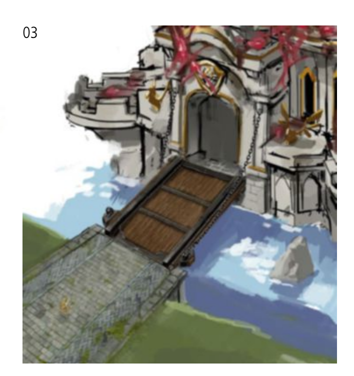
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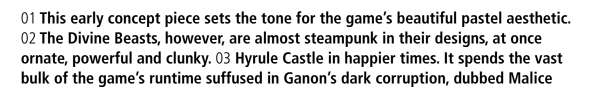
03



ONE LINK TO RULE THEM ALL

Shigeru Miyamoto recently talked about a shift in Nintendo's development philosophy for *Mario* games: where recent titles have focused more on welcoming new players, *Super Mario Odyssey* marks a return to the days of *Super Mario 64* and *Sunshine*. Is *Zelda* likely to follow a similar path? Did Fujibayashi set out to aim *Breath Of The Wild* at experienced players? "It's true that we do, for example, have lots of tribes that people familiar with the series will know, such as Goron, Zora, Rito and Gerudo," Fujibayashi begins. "There's a story revolving around the legendary Master Sword, and you'll hear the keyword 'Ganon' too. There are lots of things like that, but these are just meant to entertain players who've supported the series a long time."

"[But] with regards to the gameplay, we wanted to try something new and simplify the puzzle solving, so we did a lot of work on the themes of breaking the conventions of previous *Zelda* games, and going back to our roots. As a result of this, the game is accessible to even people who haven't played a *Zelda* game before. It definitely isn't a game made only for those experienced with the series."



01 **This early concept piece sets the tone for the game's beautiful pastel aesthetic.** 02 **The Divine Beasts, however, are almost steampunk in their designs, at once ornate, powerful and clunky.** 03 **Hyrule Castle in happier times. It spends the vast bulk of the game's runtime suffused in Ganon's dark corruption, dubbed Malice**

01

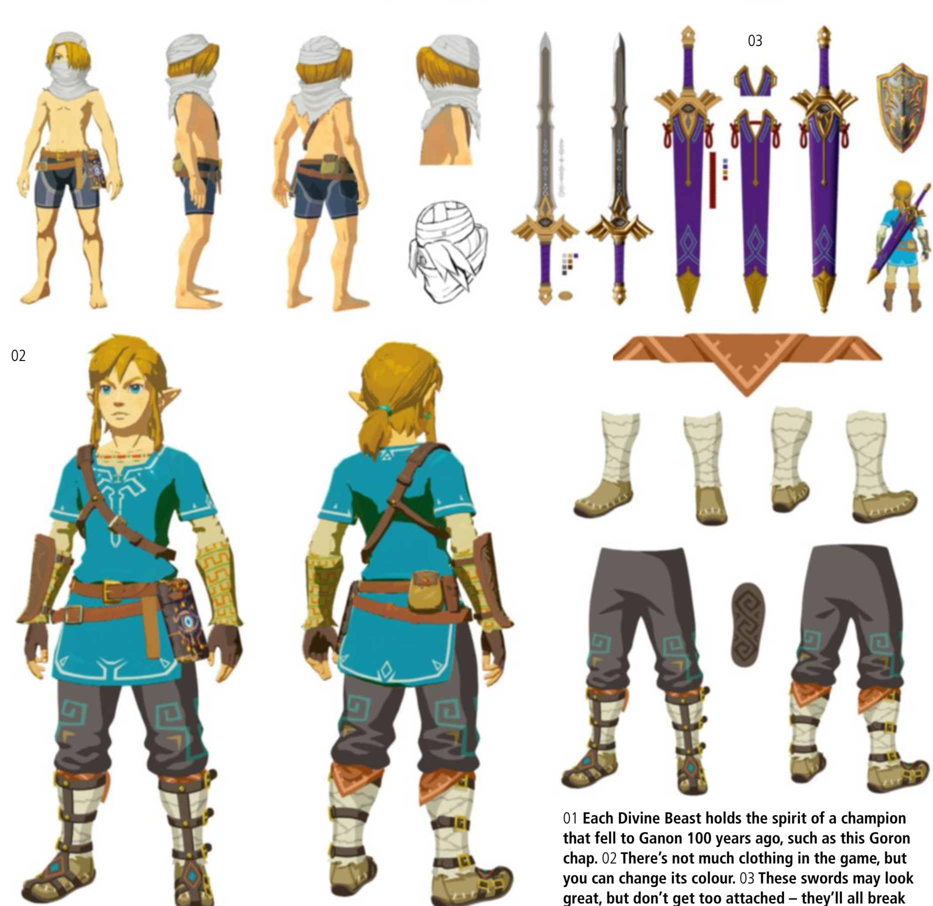


HYLIAN USUAL

The challenge of telling a compelling story within an open-world framework is not necessarily a new one, but it is new to *Zelda*. How did Fujibayashi and his team handle that? "This is something I did a lot of work on with the development staff, but I can't say too much because I don't want to spoil anything," he says. "With regards to the actual story, what I can say is that the game starts with Link waking up in a cave with amnesia, not knowing why he's doing anything. Likewise, the player doesn't know why Link is there either. Link and the player have exactly the same level of knowledge. What would you do if it were you in that situation? How would you go about finding out who you are and about the world? Your answer to that question might be the solution to the system that lets you experience a rich story in an 'open-air' game like this."

03

02



01 Each Divine Beast holds the spirit of a champion that fell to Ganon 100 years ago, such as this Goron chap. 02 There's not much clothing in the game, but you can change its colour. 03 These swords may look great, but don't get too attached – they'll all break

Talking of playing, Fujibayashi naturally hasn't had an awful lot of free time in which to play videogames lately. A couple of years ago, however, a pair of indie successes in particular managed to capture his imagination. "I was rather inspired by playing *Minecraft* and *Terraria*," he tells us. "I was able to learn from the gameplay and the possibilities found in [those games]. I could learn from the sense of adventure, exploration and how it inspired curiosity."

These virtual realms may have offered some pointers, but the real world has had a much greater impact on the direction of *Breath Of The Wild*. Fujibayashi excitedly reveals that he's part of an adventure club, in which he regularly engages in outdoor activities alongside other Nintendo staff. "[We do] things like cave diving where you actually go down into the water to get into the cave, as well as rafting tours and so on," he elaborates. "I know this may not be such a big deal in the west, but in Japan it's quite an adventure!"

The director's embrace of the great outdoors is most clearly expressed through Link himself, but it's apparent in *Breath Of The Wild*'s expansive environments, too. This may be a fantasy setting, but it's the first *Zelda* world that bears close comparison with our own. It's tempting to view the size and openness of that world as a reaction to *Skyward Sword*'s more compact spaces, but while Fujibayashi acknowledges that fan feedback is always taken into consideration, such a marked shift in the construction of its environments has little to do with criticisms aimed at the 2011 Wii *Zelda* game.

"We weren't actually looking back on *Skyward Sword* ourselves all that much, although we did add on some parts that worked well in the development of *Skyward Sword*, and revised some parts that we had concerns with," Fujibayashi says. "Something else we've done now is make it so you can climb walls basically anywhere, and you can jump off from high places and glide where you want. We had to consider what kind of landscape would work for that. In the game it's even possible to dive straight towards a lake from a cliff so high that the surface of the water looks hazy due to the distance. How can we create a thrilling adventure in a place where you can go anywhere you want? That is the kind of question we were considering as we made *Breath Of The Wild*."

Talk of cliffs and lakes reminds us of an anecdote from one of Fujibayashi's mentors. Always a man to draw inspiration from his hobbies rather than other games, Shigeru Miyamoto once recalled how a hiking trip near Kobe, one of Japan's largest cities, saw



"It's possible to dive towards a lake from a cliff so high that the water looks hazy"

him discover a large lake at the top of a mountain, and how he drew upon such moments when creating the original *Legend Of Zelda*. With Fujibayashi citing both the first game and his love for the great outdoors as key inspirations for *Breath Of The Wild*, it's as if the series has come full circle – only now Nintendo has the technology to recreate that sensation without having to fudge anything.

It's a reminder that despite this symbolic changing of the guard, as Nintendo's veterans make way for a new generation of designers – and, perhaps, future mentors – that the legacy of those who've gone before is just as vital as it's ever been.

"More than anything, what's influenced my personal understanding of what a *Zelda* game should be has been the teachings I've received from Shigeru Miyamoto in the 15 years since the *Oracle* games," Fujibayashi concludes. "I really feel that it's not because of knowledge or experience that I'm here working as a developer for *Zelda*, but because of the people." ■


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The Last Guardian
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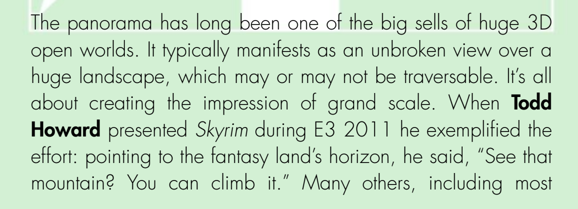
Monument Valley uses the diorama to let players easily trace a path through its levels while pulling off its perspective tricks



S C A L E - B O U N D

The return of the diorama has triggered a revolution that emphasises smallness

By Chris Priestman



The panorama has long been one of the big sells of huge 3D open worlds. It typically manifests as an unbroken view over a huge landscape, which may or may not be traversable. It's all about creating the impression of grand scale. When **Todd Howard** presented *Skyrim* during E3 2011 he exemplified the effort: pointing to the fantasy land's horizon, he said, "See that mountain? You can climb it." Many others, including most notably *No Man's Sky*, *The Witcher III* and *The Legend Of Zelda: Breath Of The Wild*, commit wholeheartedly to the same promise. But there exists a quiet rebellion among smaller videogame studios of late. Together, they reject the panorama, and have instead found cause to revive the diorama.

It was practicality that birthed the videogame diorama. The 3D software of the late '80s was hard pressed to produce anything more than small, enclosed scenes, surrounded by a void. That's why the aircraft in David Braben's 3D shooter *Zarch* could only illuminate a small square of the vast map it flew around. *Populous* followed suit but pitched its fertile patch of land from a distant, isometric perspective, setting the parameters for the god-game genre. Likewise, the castle maze in the NES game *Solstice* was realised as 252 isometric puzzle rooms, all isolated among the black. The diorama provided a service: with a single piece of terrain, it conveyed something much larger.

The arrival of 32bit consoles in the mid-'90s popularised another use of the videogame diorama. Konami used the extra power to replace traditional 2D RPG encounters with 3D battlefields in *Vandal Hearts*. This meant terrain height and map movement factored into combat strategies. Square did the same a year later with *Final Fantasy Tactics*. Perhaps a callback to the genre's roots in tabletop gaming, as well as a technical necessity, these tactical RPGs used dioramas to give visual clarity to the topography of the battlezone.

As the videogame diorama was established, the methods by which it would be made obsolete were becoming widespread. Mountain ranges, skyboxes and invisible walls were being carefully positioned to prevent players from reaching or even seeing the edge of 3D worlds. Players wanted verisimilitude, to believe fully that they were exploring another reality inside the screen. When the technology caught up with that desire it allowed the videogame panorama to take over, leaving the diorama in the dark.

One reason for the resurgence of the diorama isn't anything new: the approach ensures that the production scale is manageable for a small team. "We don't have to worry about doing infinite horizons, about randomly generating a ton of space that won't even be used for gameplay, figuring out LOD rendering on lower-end GPUs," says **Adam Saltsman** on using dioramas in his road-trip survival game *Overland*.

Saltsman also sees the diorama as beneficial to *Overland*'s marketing, explaining that its contained spaces communicate the idea that every decision you make matters a lot. But he also sees dioramas as a good visual marketing tool for other modern independent games. "You can see the whole level in one go most of the time, and I think with very few prompts you can start to sort of play the level in your head," he says. "This is a very good thing in the competitive indie game market right now." Saltsman also found that the diorama has great potential beyond production and marketing, and he's far from the only one. The diorama is now taking hold as an important storytelling device in videogames and emerging as an aesthetic in its own right.

"WE DON'T HAVE TO WORRY ABOUT DOING INFINITE HORIZONS, ABOUT GENERATING A TON OF SPACE THAT WON'T EVEN BE USED"





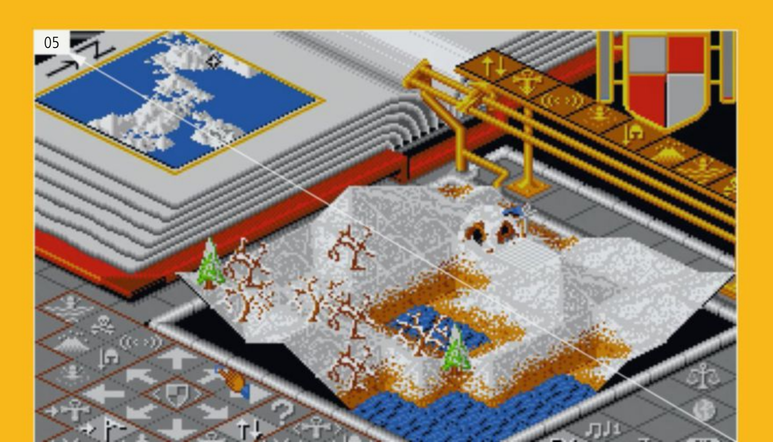
OVER THE EDGE

Birthplace Of Ossian **lets players explore 100km² of virtual Scottish Highlands. Creator Connor Sherlock has never visited Scotland himself, and so pieced together the tones and topography of the landscape from paintings, photos and memories of watching Highlander. The terrain isn't meant to be viewed from above like a traditional diorama, but when it is, you can see the crisp lines of its square-shaped dissection. One of the edges in** ***Birthplace Of Ossian*** **isn't hidden by mountains like the others, but is instead open to the surrounding void. It's possible to fall off the edge into negative space. "I wanted the player to be aware of the non-real nature of the terrain, and the visual language of dioramas was easy to leverage," Sherlock says. "Instead of hiding the edge of the game world like most videogame worlds, I wanted to highlight it, and invite the player to play with escaping the boundaries."**

01 ***Overland***
02 ***Birthplace Of Ossian***
03 ***Solstice***
04 ***Final Fantasy Tactics***
05 ***Populous***







Dioramas in their classical context have always told stories. Fierce animals frozen in time by taxidermy were displayed in tableau across museums of the 19th century. The viewer was invited to animate the stillness of the exhibits in their mind, to adventure into the illusion. It's a form of storytelling transmitted through suspended theatrics and the laws of perspective.

Random Seed Games uses these techniques in its noir-style text adventure *The Monster Inside*. Dioramas of each location are used as a visual anchor, so the creators can focus on building character and writing dialogue. The characters themselves are absent, however, in the hope that it encourages you to think like a detective. "I wanted the player to visualise and imagine for themselves how [the characters] might look and move through the game world," says **Tyler Owen**, the game's programmer.

Adam Wells went the opposite way with his own narrative game, *Grimsfield*, animating everything he could in his monochromatic dioramas to encourage players to dwell on the details. "I really like the idea of treating a game space like a physical theatre set, filled with functional requirements such as props and actors, while giving a sense of theme," he says.

pathologists while researching her game about running a funeral home, *A Mortician's Tale*. What stuck with her is the "feeling of isolation or intense focus that comes with working with the deceased and dealing with their loved ones". Using dioramas rather than creating a whole world is her way of capturing that visually.

The association between dioramas and death is repeated by **David Prinsmel**, the art director of *Winter*. "We used the isometric perspective to create a disconnected feeling, referring to a soul that's floating up from its body and viewing it from above," he says. *Winter* is about a young girl trapped in the second before her death. She has to explore small domestic dioramas to understand her situation and also help others caught in the same morbid moment.

Rotating the dioramas in *Winter* to explore their simple, non-textured objects feeds into another of the game's themes: childhood. "Children have a fascination for the small things under the bed or behind the door. Places where grownups don't look," Prinsmel says. "The game encourages you to think like a child and look behind every corner to find a small key or other object that will help you advance."

"THE GAME ENCOURAGES YOU TO THINK LIKE A CHILD AND LOOK BEHIND EVERY CORNER TO FIND A SMALL OBJECT THAT WILL HELP YOU"

Magic Flute takes the connection between videogame dioramas and theatre to its logical endpoint. It turns the multimedia stage design seen in Japanese theatre director Amon Miyamoto's adaptation of the Mozart opera The Magic Flute into spatial puzzles. The game's designer, **Olaf Morelewski**, says he chose the diorama form as it's able to "maintain the limitations of the physical stage" while also letting the story unfold in other locations without becoming unfaithful to the opera house's scenography.

Humble Grove was also inspired by theatre to make use of dioramas in its narrative game, *29*. Co-designer **Tom Davison** saw the rotating set for the production of Don Giovanni at the Royal Opera House and illustrated a bedroom in the same style afterwards. He found that being able to rotate the room in 3D gave the everyday space a new sense of discovery. This style of illustration suited *29*, it being a personal game about two graduates living in a small flat. The idea is to interpret the characters' minds by examining their domestic clutter, but also through the touches of magical realism, when inner thoughts affect the outer world: ferns curl up in a rice cooker, swamps form in glass bottles. The diorama format helps sell these moments. "The black space around the rooms started as a temp thing, but we found it exaggerated a sense of claustrophobia and not being able to quite place yourself in the world. Kind of an otherworldliness," Davison says.

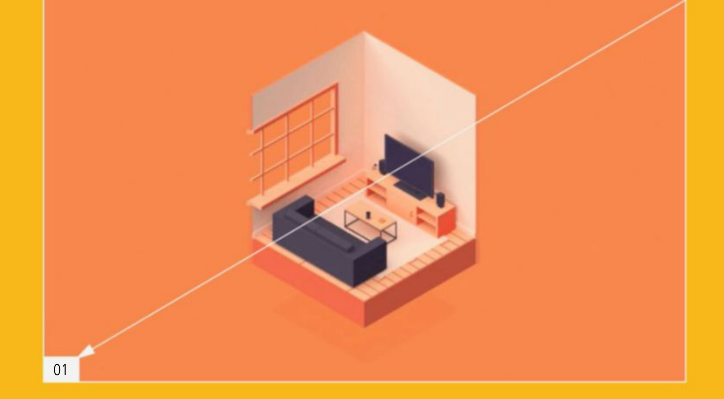
Gabby DaRienzo is banking on her dioramas to have the same effect. She spoke to morticians, funeral directors, and

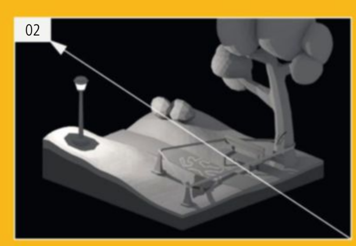
The association between dioramas and childhood comes easily. They're able to instantly connect us to the toy models and dollhouses of youth, which allow children to learn cultural norms and experiment safely with the apparatus of life. We feel a power in looking at them from above, a delight in feeling big, like Gulliver presiding over the tiny town of Lilliput.

The intrinsic appeal of miniatures is what makes Square Enix's *Go* series of games so irresistible. Each entry renders the architectural domains of its namesake as mini dioramas: *Hitman* and the guarded headquarters, *Lara Croft* and the ancient tomb, *Deus Ex* and the urban dystopia. Seeing the characters move as if they are figures in a boardgame is conducive to childlike joy.

Card Hunter mastered this a year before *Hitman Go* by recreating the physical pieces of tabletop RPGs in a digital game. "Most of the team grew up playing early roleplaying games in the '80s and we wanted to recreate the feeling of sitting around the table playing a paper-and-pencil game with friends," designer **Jon Chey** says. For him, the physical components are imbued with a naivety that isn't so common in the "more polished nature of the modern experience".

For the ultimate in tactile miniatures in games you have to look to *Lumino City*. A ten-foot-high model metropolis was made from paper, card, miniature lights, and motors for the adventure game; then tiny characters were made to climb across it with the magic of stop-motion animation. "The fact it's















01 ***Winter***
02 ***The Monster Inside***
03 ***Magic Flute***
04 ***29***
05 ***Lumino City***
06 ***Grimsfield***
07 ***Hitman Go***
08 ***Card Hunter***
09 ***A Mortician's Tale***





made from materials everyone understands and which feel real allows the player to dive into that world so much more quickly," says **Luke Whittaker**, the game's creative director. "Perhaps [it connects to] memories people have of toys and things they made from their childhood."

That's certainly the case for Honig Studios, which found inspiration in classic ship-in-a-bottle artworks for its puzzle game *Impossible Bottles*. Each level is displayed as a split universe inside a bottle: up top is our reality, while below is a scientist's labs and the golems inside. The two universes interact, too. If players make a mistake while assisting the scientist it will cause chaos above ground, while correct moves can restore balance. What the Honig team delight in is peering into these secret worlds, which seem impossible, "showing objects that don't really seem to fit through the mouth of the bottle".

Reece Millidge was similarly struck by his source of inspiration when designing the zany isometric golf course islands of *Wonderputt*. He looked to recreate the style of scientific illustrations in encyclopedias that "isolated and cross-sectioned a piece of land to reveal its hidden secrets". From there, he added flowing sands and liquids that defy physical laws in ways that prove "tirelessly novel to our instincts".

Monument Valley is testament to Millidge's claim, as it has wowed millions with its absorbing, physics-bending illusions. Using the perception tricks of MC Escher, it sees unconnected walkways join as one without having moved, while staircases ascend to a lower height. Unravelling each impossible diorama parallels the experience of solving the delicate complexities of a puzzle box.

The recent rise of VR has brought with it a return to the practicality of the diorama. Those working with VR during its current infancy have been able to borrow some of the customs associated with interacting with dioramas to ease their audience into their virtual experiences. One of those is **Daniel Ernst** and his project *The Shoebox Diorama*, a series of three short stories told through fantastical virtual spaces and the objects inside them. To enter these worlds, the viewer has to press their face against peepholes cut into shoeboxes. It's a simple gesture, but one that reinforces the idea of entering an enclosed space, the confines of which Ernst says avoid overwhelming the viewer as they get used to the new reality.

Ernst also finds that their timeless quality "is why dioramas work so tremendously well in VR". Visiting a single moment without the pressures of time encourages people to reflect and take in the details of the environment. "When you would play a traditional game you would run past a desk with stuff on it mostly unnoticed, but in VR dioramas these details matter," Ernst says. Using that increased player curiosity, Ernst is able tell stories in VR that he hopes inspire a sense of wonder.

For **Nick Rudzicz**, it's the scale of dioramas that's providing room for experimentation in VR. "Kimberly Koronya's *Globes* seems to be going the 'train model' route, putting a whole city at your feet," Rudzicz says. "While Uber's *Wayward Sky* changes your scale and perspective quite frequently throughout the game, with different theatrical, objectivising or subjectivising effects."

For Rudzicz's own VR project, *GNOG*, his inspirations have been playset design and children's toys. Every level is a colourful head that has a whole world and different mechanisms to play with inside. *GNOG* will also be available without VR support, but Rudzicz says there's a physicality and closeness to the heads that only VR provides. He adds that the trick with diorama games in VR is being able to ignore the biological constraints of the body and explore how we relate to both large and intimate spaces: "There's a lot of emotional range you can find in these miniaturised, abstracted worlds, and how we engage with them."

"I GREW UP WITH LEGO AND MODEL TRAINS, BUT ONLY IN VR CAN YOU BUILD SOMETHING THEN SHRINK IT DOWN AND SEE IT FROM THE INSIDE"

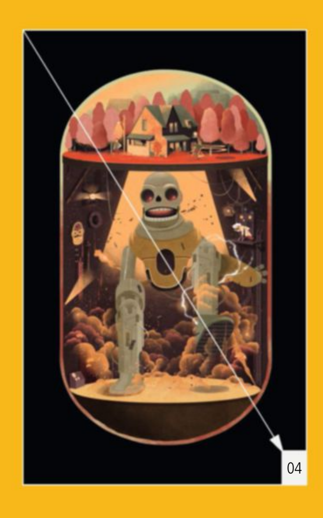
Sarah Northway agrees with that notion. She's the co-designer of *Fantastic Contraption*, which provides a room-scale virtual space in which players construct machines in order to overcome challenges. Northway was first attracted to VR for its large-scale experiences that let you feel like you're in another world. "But during early development we toyed with a smaller-scale version of *Fantastic Contraption*, and on a lark we scaled it down onto the floor, so I could sit cross-legged like a child playing with toys," she says.

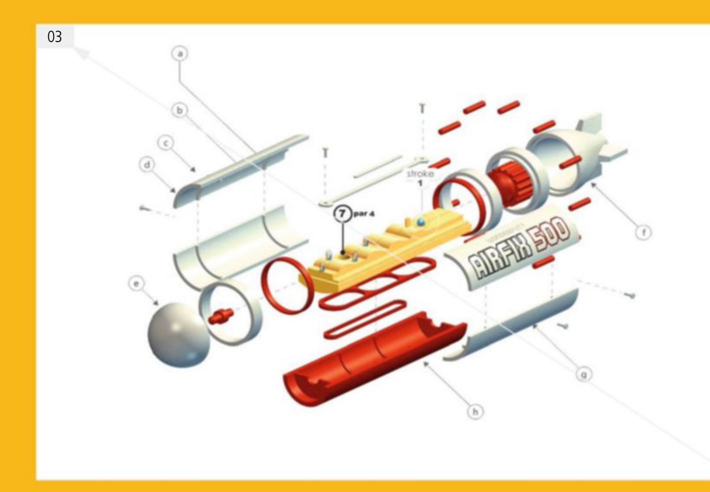
Due to that experience, a recent update to *Fantastic Contraption* lets players choose the scale of their playset. "We call the smallest size 'Kaiju Scale' because you feel like Godzilla looking down on the world from a great height," Northway says. "I grew up playing with Lego and model trains and little Rube Goldberg machines, but only in VR can you build something then shrink it down and see it from the inside." Northway enjoys Google's VR painting app Tilt Brush for the same reason. "Now that Tilt Brush lets you scale and rotate your work, I'll make something in room-scale then shrink it down to see it in miniature."

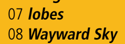
Another VR game that lets players have fun with the scaling possibilities of VR in a diorama world is *Giant Cop*. In it, players stomp around Micro City, foiling bank heists and solving murders across its various districts with their sheer size. But what it doesn't let you do is destroy the city. Perhaps this is what's next for the diorama, as it pushes further into VR. After all, half the appeal of a sandcastle is knocking it down. ■











01 ***Giant Cop***
02 ***Fantastic Contraption***
03 ***Wonderputt***
04 ***Impossible Bottles***
05 ***GNOG***
06 ***Miegakure***
07 ***lobes***
08 ***Wayward Sky***



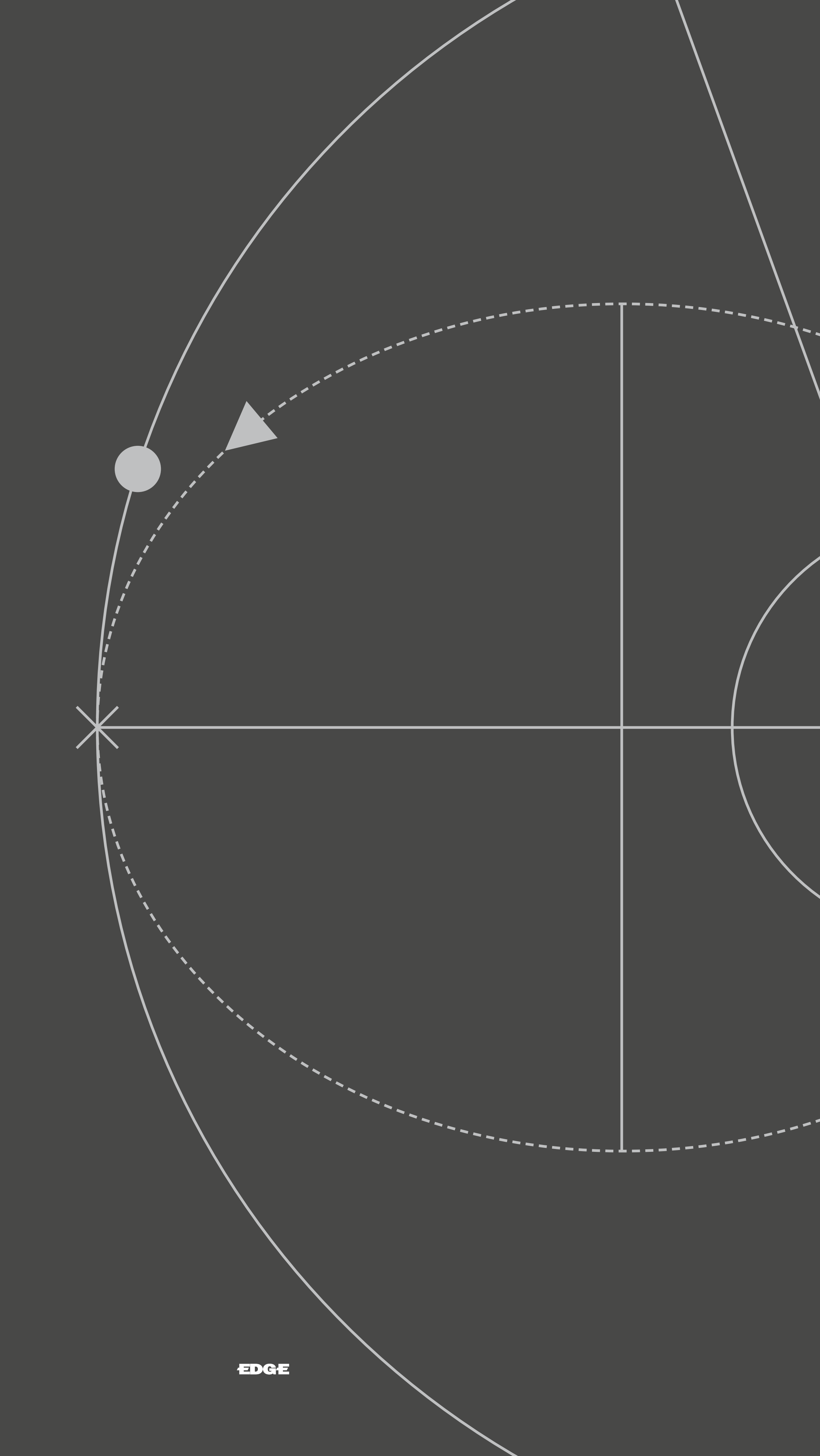


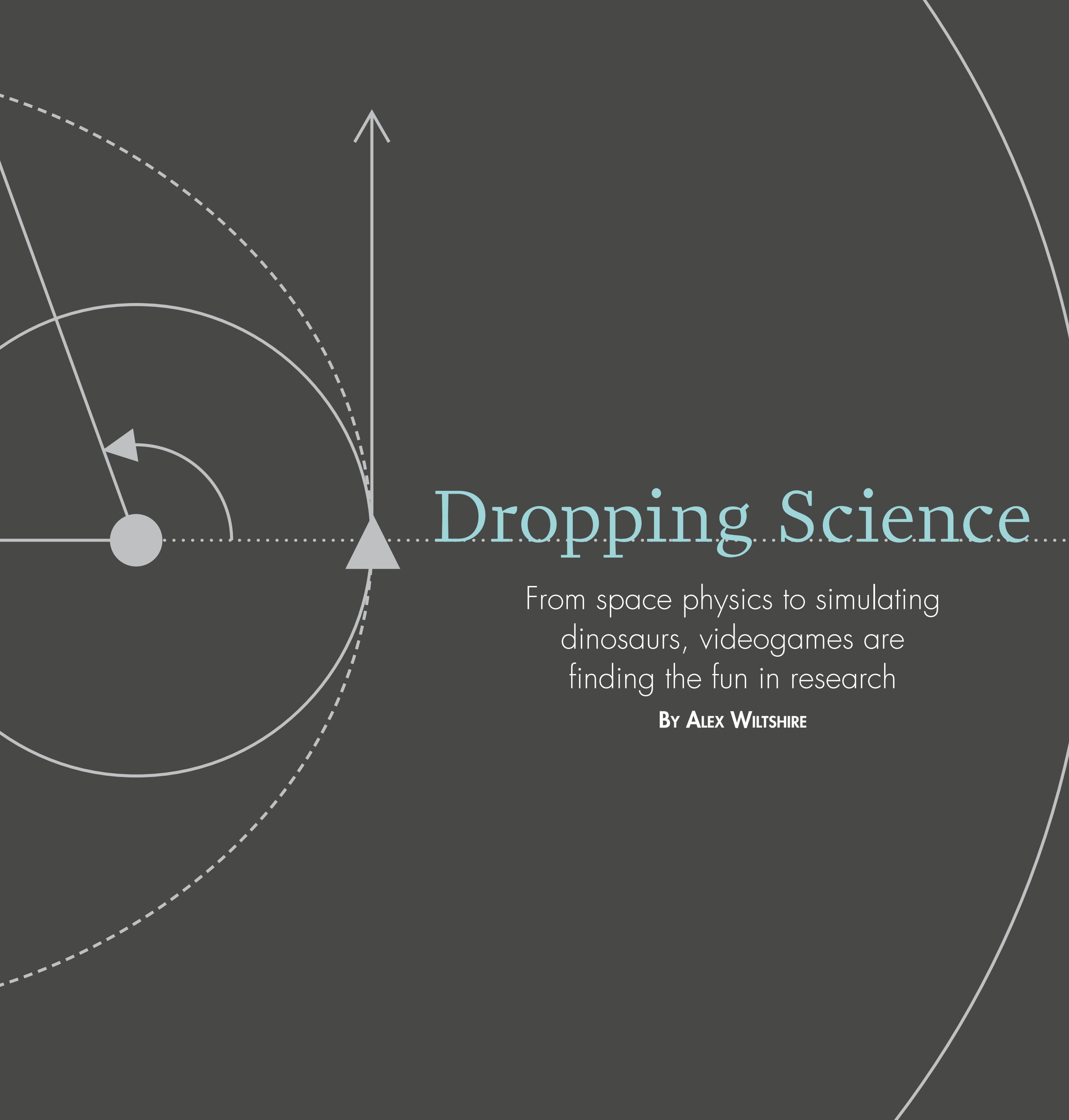
PARALLEL WORLDS

Western notions of the diorama are preceded by the Japanese art of bonkei and bonsai. Dating back to at least the sixth century, these are the practices of growing miniature landscapes and trees contained in trays and pots. Surprisingly, only a few videogames have acknowledged these remarkable art forms. The closest is *Mountain*, an ambient game about watching over a mountain floating in space. But where its tribute falls short is in the lack of player control; a vital part of bonkei is the interception of the owner's hand. It'd be remiss to ignore *Prune*, the meditative puzzle experience about trimming the branches of blossoming trees to get them maximum sunlight. The same goes for the bonsai simulation game simply called *Bonsai*. But the game to look forward to is *Miegakure* (Japanese for 'hide and reveal'), which utilises Buddhist garden design concepts while challenging players to navigate the fourth dimension, visualised as warped, ever-shifting dioramas.









Dropping Science

From space physics to simulating dinosaurs, videogames are finding the fun in research

By Alex Wiltshire

Games such as Plague Inc mark a break from the typical edugame model, where play labours under the load of teaching

Back in March 2013, the US Centers For Disease Control And Prevention invited a British game developer to speak to its staff about his game. You might know the CDC from The Walking Dead or as the starting location in boardgame Pandemic. It's a serious place, where the science of epidemiology meets cutting-edge medicine. The game was Ndemic Creations' *Plague Inc*, in which you create a disease and evolve symptoms such as exploding heads and resistance to antibiotics in order to kill every last human on Earth. The CDC saw *Plague Inc* as an opportunity to raise public awareness of how diseases propagate and can be prevented. But the game isn't about scientific accuracy. Its sights are squarely set on something else.

"*Plague Inc* is considered an educational game, but that's not why I made it," says developer **James Vaughan**. "It educates by accident. I always choose fun over realistic."

It's one of a number of videogames that use scientific research and simulation to create worlds and scenarios that offer deep and involving play, whether space physics in *Kerbal Space Program*, chemistry and electrical engineering in Zachtronics' *SpaceChem* and *Shenzhen I/O*, or the distant past, as recreated in forthcoming dinosaur sim *Saurian*. They mark a break from the typical edugame model, where play labours under the load of teaching. And they're not open-ended sims either, using research to model the real world. They're imaginative, fantastical and often flexible with the truth. "I'll do whatever it takes to make a cool, engaging game, science be damned," says **Zach Barth**, Zachtronics founder and also maker of *Infiniminer*, the game that inspired *Minecraft*.



The fantastical machines you assemble in Zachtronics' 2009 title *Infiniminer* were inspired by Chinese factories, and deliver a fictitious expression of the practicalities of the real world

For Vaughan, science is a fertile source of shortcuts to game design ideas. *Plague Inc*, which is heavily based on *Pandemic* (not the boardgame but a series of Flash games), uses various real-world principles to provide challenge and strategy to spreading your disease as widely as possible and killing everyone before humans develop a cure. For example, a large part of the game is based on managing the relationship between lethality and infectiousness: you don't want to kill the infected before they've had a chance to pass the disease on. So when is a good time to start evolving lethal traits?

You'll also have to consider how to approach infecting rich nations, since they can detect disease and develop cures quickly. Vaughan used World Trade Organisation data to flesh out details like this, details that add to the dense sets of numbers that interact underneath the visuals. "I didn't have to sit down and code that, just put real-world data and models, and that drives it," he explains. "But if I say diseases can't spread well in countries with strong healthcare systems then that's not fun, but with antibiotic resistance, suddenly these rich countries are vulnerable. Increase the depth and the model and it makes the game more fun."

It's important to note that *Plague Inc* isn't attempting to be a simulation. It uses models but doesn't model real life. "Often, if you model things accurately enough, you get emergent gameplay you wouldn't ▶

get otherwise," Vaughan says. The result is a game that's made up of a carefully curated set of features that afford challenges and counter-strategies. "I started from a scientific point of view and then tweaked and adjusted as necessary."

Vaughan doesn't care that his game isn't strictly medically correct, or that it features various gruesome diseases: cysts, public defectation (increases infection rate and also the cure rate as the world panics), walking dead (extreme fatigue, causing the cure rate to decrease). These games revel in being free of the constraints of purely being accurate. Hurling *Kerbal Space Program*'s little characters into orbit in badly designed rockets benefits from the complexities of rocket science and none of its real-world ramifications.

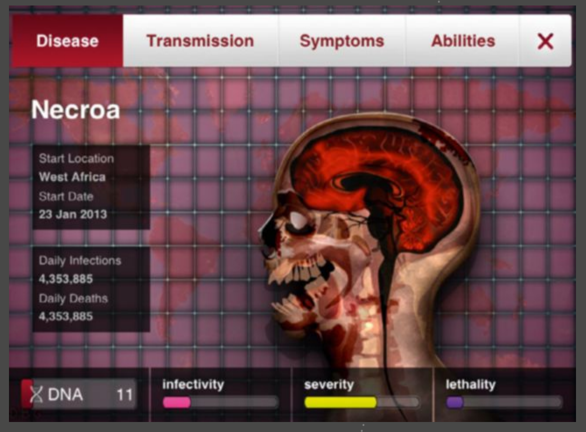
"If you have one foot in reality and one in a totally original system, I think it's the best of both worlds, because it takes on the meaning of the real world but you're in complete control of the systems," Barth says.



Ndemic Creations' James Vaughan is a former economist

Making the undead

Naturally, *Plague Inc* has introduced zombie and vampire outbreaks to its list of scenarios, the existing models providing a chance to explore how they might actually work. "I wanted a scientifically plausible zombie outbreak," Vaughan says. "I started out enjoying *The Walking Dead* but they had no interest in exploring what happened. I lost a huge amount of enjoyment at that point – I wanted to know the hows and whys and what would need to happen for it to work. I sat down and thought about the symptoms, how the world would react to it." *Plague Inc*'s depiction is unabashedly fictional, but attempts to make its zombies and vampires as credible as possible. The zombie outbreak explores how they can stay ambulatory without breathing, so the disease's symptoms promote anaerobic respiration, which leads to lactic acid buildup in the brain, which ends up killing the victim. "It's a thought experiment, to see where things go."



Plague Inc's Necroa Virus expansion introduces the evolution of the symptom Cytopathic Reanimation. "Formation of complex neural structures enables reanimation of damaged cells" and sees the dead transform into zombies



Plague Inc's presentation is carefully technical to reinforce a sense of scientific detachment, even if you're playing as a genocidal bacterium or virus

> "What makes science unusable in games is that the real world wasn't designed to make sense; it wasn't designed to be understood"

Barth's recent games have all been puzzle-based, and as you play them you experience the sensation that you're learning profound principles about how the real world works. In *SpaceChem* you design and build machines to synthesise chemicals, laying out different components that bind atoms to produce molecules to carry out each level's requirements. But though the molecules are generally scientifically correct, almost nothing else is. No process creates molecules in the way they are made in the game.

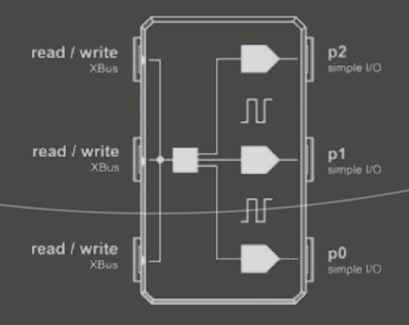
2015's *Infinifactory* presents players with a similar challenge, but with a pulp-sci-fi-meets-mass-manufacturing theme (you've been abducted by aliens and they want you to make weird stuff for them) and in 3D rather than 2D space. It works nothing like a real factory, though for the animations and processes of its machines, Barth and his team were inspired by watching videos of Chinese manufacturing lines.

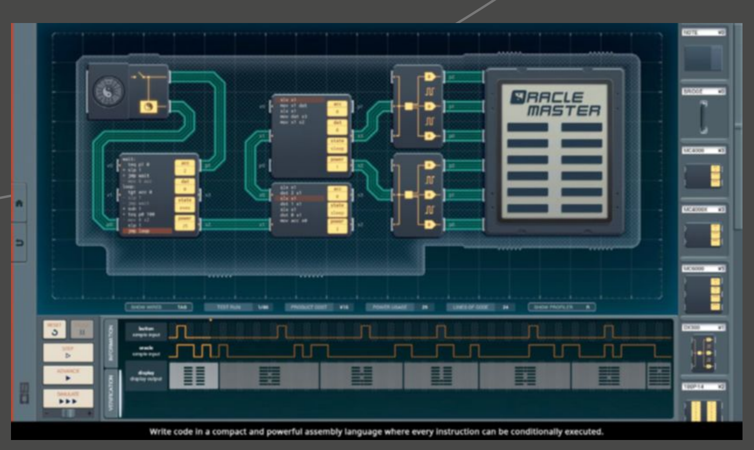
In Zachtronics' games you learn to design systems, rather than learn facts about the real world through them. In fact, Barth doesn't really believe that pure science is a good basis for designing games. "What makes science unusable in games is that the real world wasn't designed to make sense; it wasn't designed to be understood or exploited. But our systems are, so we make stuff to be exploited and learned."

More specifically, Zachtronics produces simple simulations of fictional systems. "We make a certain kind of game," Barth says. "One of our strengths is inventing systems that allow players to use tools in an emergent fashion to solve open-ended problems."

But while fictional, the theme and styling of Zachtronics' two most recent games, *TIS-100* and *Shenzhen I/O*, are much more explicit in their relationship with the real world than previous releases. *TIS-100* has you writing assembly code to run on a fictional CPU, while *Shenzhen I/O* has you designing electronic circuits for manufacture. *TIS-100* is presented with white ASCII text on a black background, as if output by the '80s-style computer tech you're working on, and *Shenzhen I/O* presents in a glossy modern operating system, with email and electrical readouts and circuit visualisation. Both also come with PDF manuals, which you'll need to read; *Shenzhen I/O*'s is 40 pages long and the game strongly advises that you print it out and store it in a binder with dividers for easy access to sections.

No electronics manufacturer or CPU works in the way these games depict, though you will learn a little about the basics of how a chip operates and about how circuits comprise components taking various outputs. Simply exploring these systems is mind-expanding. "But not by the content, more the process," Barth says, reluctant to suggest that his games are good for imparting facts





Zachtronics' *Shenzhen I/O* combines the systems design of *SpaceChem* with the programming of *TIS-100* as you assemble and program components such as heat sensors and LCD displays to make electronic products



Zach Barth's puzzle games, such as *TIS-100* and *Shenzhen I/O*, have a signature style

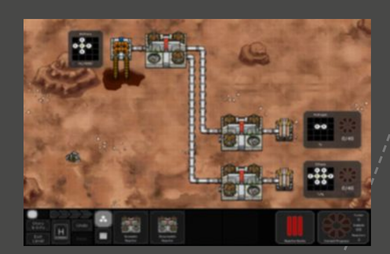
about the world. "*Pokémon* teaches you a lot of system mechanics and a lot of facts. A *Pokémon* player knows what's good against a Charmander; you learn a lot in *Pokémon*, but unfortunately you learn something useless that has no transferability to the real world. Can games be educational? Absolutely. Can games be useful? That's the harder question."

Instead, the themes of Barth's games lead to you immediately recognising what kind of game you're going to be playing. He's hesitant to suggest that the themes he's chosen for his games will ever have truly mainstream appeal ("Everyone loves chemistry! Which is not true"), they attend significant niche interests: electronic engineering, chemistry, computer chips, manufacturing.

Plague Inc has sold millions of copies across the globe, its 'kill everyone in the world' formula hitting a note from South Korea to Europe. "That is because it's based on science and science is a universal fact," Vaughan says. "It's a shared understanding of something and is relevant to everybody, so it appeals with minimal localisation. If I hadn't based it on that then it wouldn't have had that impact at all."

And, beyond immediate appeal, he believes that *Plague Inc*'s basis in scientific fact makes it easy to learn to play. Everyone knows what coughing is and that it will lead to greater infectivity, and how richer nations will have better healthcare than poorer ones.

Games based on the science of space have also proven to be widely appealing, with *Kerbal Space Program* and *Universe Sandbox* regularly heading Steam's sales charts. Both are strongly grounded in physics, with *KSP* happy to take liberties in the interests of fun and *Universe Sandbox*, created by developer Dan Dixon, taking a hyper-realistic simulation approach. In it you can see what happens to the Solar System if you massively expand the density of Earth, create planets with land masses that match Game Of Thrones' Westeros, or simply explore, with a mission statement that wishes to "reveal the beauty of our universe and the fragility of our planet". ▶





FROM TOP Zachtronics' *TIS-100*, an assembly language game; *SpaceChem*, a chemistry game; and *Infinifactory*, a manufacturing game

“Rather than stop them, we leave it to the balance of the game so that players learn what behaviours are realistic”

Another demonstration of the immediate appeal of games based in science fact is *Saurian*. Currently in development by an indie team, Urvogel Games, in May last year it ran a Kickstarter that ended up smashing through its $55,000 target and reaching $220,709 with the promise of an open-world survival game about dinosaurs based on a real site, an area of the Hell Creek Formation in Montana called Bone Butte.

Saurian is a model for the use of science research in games, and its developers have the ambition for it to be “the best depiction in pop culture of dinosaurs right now”, in the words of AI programmer **Henry Meyers**. Its map is a four-kilometre-square section of clearings, redwood forest, conifer swamp, beaches with palms: a 1:1 recreation based on the findings of palaeontologist Robert DePalma, who based his Masters thesis on the location. What makes Bone Butte special is that it covers an extraordinarily short amount of time by paleontological standards, just seven years, so it affords a rare snapshot of late-Cretaceous life.

In the game, you'll play one of a number of different dinosaurs, living and surviving in an ecosystem, from Tyrannosaurus rex to Triceratops. When it reaches Steam's Early Access later this year, its first playable dinosaur will be Dakotaraptor, a two-metre-high relative of Velociraptor. But its dinosaurs will be quite different from what many players will be used to, since they're based on up-to-the-minute theories of what dinosaurs looked like.

Dakotaraptor is covered in striking black-and-white feathers, while T rex has shaggy plumage across its back and a feature that has only recently reached strong scientific consensus: lips rather than the usual bared teeth. The team looked at creatures with similar teeth and found they all had lips, and later found a new study of the jaws of lipped creatures suggesting that T rex had lips similar to snakes.

The team will support the science rather than go with what audiences might be more comfortable with. “Dinosaurs in general are very stiff compared to mammals,” lead animator **Bryan Phillips** says, explaining that *Saurian*'s beasts will have less range of movement in their limbs and spines than many people will be used to from their experiences of watching Jurassic Park, which has set the popular perception of dinosaurs since the '90s. “With our T rex we kept getting these messages that it looked too stiff and needed more weight, so we tried it and posted it, and a while later John Hutchinson [a professor of evolutionary biomechanics] came back to us and said, ‘What the hell did you do?’” The team immediately reverted to the original design.

Sometimes, science leads to new play features. When the team applied to Dakotaraptor a formula developed by palaeontologist Michael Habib for estimating how far and high it could leap, based on leg length and musculature, they discovered that the dinosaur could jump four metres vertically, and from a running start at least 12 metres horizontally. “We wound up with an animal doing things we never expected of it,” project lead **Nick Turinetti** says.

Studies of Dakotaraptor claws also resulted in gameplay changes. Though raptors are often depicted as slashing with their claws, Dakotaraptor's are round in profile, so they wouldn't cut. “It threw out the idea of them kicking and slashing with their feet,” Turinetti says. “Instead, their feet have similarities with hawks and owls, so instead of running and kicking on big prey, it's more a mixture of big cat and hawk, using its body weight to pin and grip with its claws, and then holding and eating its prey alive.”

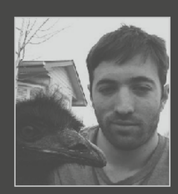
The team says that all this will be in the game for players to discover. As a Dakotaraptor you can attack a Triceratops, but its size means your attempt to pin it won't go well. “Dakotaraptors wouldn't have attacked anything, but players do,” Meyers notes. “But rather than stop them, we leave it to the balance of the game so that players learn what behaviours are realistic. We make



Development sketches for Acheroraptor, expressing how bird-like palaeontologists currently think this raptor was







FROM TOP *Saurian* project lead Nick Turinetti; AI programmer Henry Meyers; lead animator Bryan Phillips

the game mechanically incentivised to do what's most realistic."

Whether this will lead to *Saurian* being fun won't be clear until it's out, but it fits in the context of it being a survival game, in which you naturally test strategies and learn what works when it leads to living another day. The survival genre is a good fit for the team's determination to present firm science fact in the face of freewheeling videogame-player attitude.

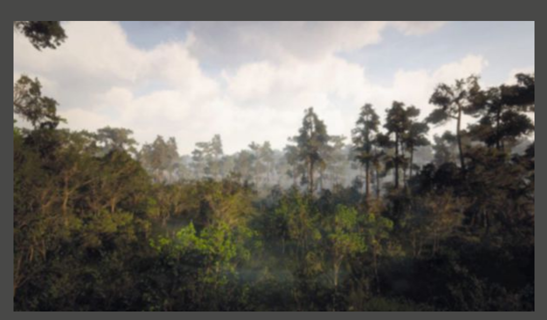
Whether *Plague Inc*'s take on realtime strategy, *Saurian*'s take on survival, or Zachtronics' take on puzzle games, games are proving fine playgrounds for science to become truly engaging. Having found arresting spectacle, emergent depth and universal accessibility through a base in science, they're games that have learned it doesn't matter that players might not really end up being educated. But their basis in actuality lends them a special extra quality. "I like stuff that's realistic," Barth says. "There's some magic there in making something that feels real." ■





Plant roots

Most games can get away with creating just a few types of vegetation and pasting them around the world, but *Saurian*'s devotion to paleontological truth made creating its Hell Creek an enormous job. The team wanted at least 25 species, from ground cover to trees, plus variations of each, including saplings and partially grown examples. The result was the need to create between 100 and 150 models. "There are lots of mixed-up records about family groups," Turinetti says, describing the process of finding real-world analogues on which to base the recreations as a "multi-year odyssey". Ginkgoes were easy, since they haven't changed in millions of years; others were far trickier, such as Dryophyllum, which science has regularly moved between different plant families. Eventually, the team realised it's similar to a walnut tree and discovered a species from South East Asia to base it on, with leaves that closely resemble the fossils.



Saurian is set in a location informed by palaeontologist Robert DePalma's studies (top), with wildlife such as its T rex (left) based on the latest research

THE MAKING OF...



DARKEST DUNGEON

The RPG that makes suffering a selling point

By Edwin Evans-Thirlwell

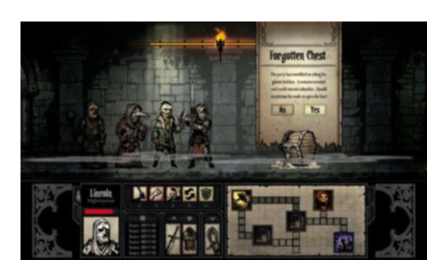
Developer/publisher Red Hook Studios
Format Mac, PC, PS4, Vita
Origin Canada
Release 2016

An RPG in which heroes grow more potent and more unstable with experience, Red Hook's *Darkest Dungeon* is both a brilliant corruption of its genre and a sly piece of workplace satire. The premise blurs HP Lovecraft with *Diablo* and *Ultima* – it tasks you with reclaiming your family manor from a tide of evil unleashed by the wayward Ancestor, a process you work through by hiring and training adventurers at a nearby hamlet. But in its representation of stress as a stat that creeps up as warriors push deeper into the shadows, peaking in an affliction that may see characters sabotaging each other or spurning your orders, the game also channels something a little closer to home.

Red Hook founders **Chris Bourassa** and **Tyler Sigman** have seen their share of stressed-out teams. A one-time aerospace engineer, Sigman was lead game designer at Backbone Entertainment until 2007, where he worked on *Age Of Empires: Age Of Kings* for DS, and later studio lead at Z2Live's Vancouver subsidiary, after negotiating the acquisition of Big Sandwich Games. A fellow Backbone alumnus, Bourassa co-created the *Monster Lab* IP and was associate art director at Propaganda Games from 2007 to 2010, overseeing the cancelled *Pirates Of The Caribbean: Armada Of The Damned*.

"We wanted to provide a bit of that edge, where you can set expectations for people, you can set really medieval performance targets," Bourassa reflects. "They may not always approach them in the way that you would like them to, but that distance from people is what makes a good leader. Your ability to roll with punches, work around people's intricacies and foibles and still arrive where you need to go. We thought that was an interesting way of approaching a party-based game."

Neither the game's afflictions nor its associated character quirks – which range from a gambling addiction that may leech away your gold reserves in town, to a fascination with torture that may see your healer placing her hand inside an iron maiden – are the result of clinical research. Rather, they're playful exaggerations of meltdowns at work, informed by portrayals of battlefield trauma in shows such as Band Of Brothers. "I've been fortunate – I haven't been in a life-or-death situation with these sorts of things, but you can see how people respond to stress," Sigman says. "You're heading for a deadline, and some people really rise to the occasion, and others sort of panic. The same person may undergo both of those things at different times – they might lose it at one point, and be the rock of the team at another."



The game features thousands of lines of dialogue, tied to specific situations, monsters, diseases, afflictions and quirks

The game's unspoken moral, of course, is that in putting these poor souls through the wringer you are as much a monster as the nests of teeth and tentacles that befoul the manor's recesses. "You realise that you have to be heartless towards your heroes, and by the end of the game you're really as destructive and self-interested as the Ancestor," Bourassa says. "So really you become the villain, but we don't label that with a big red Renegade dialogue choice."

"A KLEPTOMANIAC, ALCOHOLIC CRUSADER KNIGHT IS AN INTERESTING PROSPECT STRAIGHT OUT OF THE GATE"

Bourassa and Sigman met informally to discuss ideas for what would become *Darkest Dungeon* in 2012, and soon gravitated to the concept of an otherwise traditional RPG in which heroes have frailties that can't be ironed out by levelling up or upgrading your gear. "I was just kind of struck by this ironic notion of power in videogames always being represented by your equipment, whereas I would be useless if I was given a glowing sword and asked to fell a walking skeleton," Bourassa says.

A prolific boardgame designer in his spare time, Sigman also drew on his tabletop RPG experiences. "A really good tabletop roleplayer isn't afraid to be cowardly in the game, because that fits their character, or it fits the situation," he notes. "But RPGs on computer always throw you into this situation where it doesn't matter if your character has one hitpoint left and he's fighting a dragon – you're still sitting there clicking the attack button. And we thought, what if that guy's like, 'Fuck this – I'd rather live another day'?"

Bourassa and Sigman founded Red Hook in 2013 using their own savings, having failed to obtain a grant from the Canada Media Fund, and formally began development of *Darkest Dungeon* that April. With the conceptual pillars in place – including semi-randomised dungeons, and the ability to rid heroes of the dire effects of stress by spending money at rest facilities in town – the game took shape quickly.

"Once we knew the theme, it was just trying to find a way to present the game the right way," Bourassa says. "For example, the assumption with a CRPG is that you're dealing with an isometric perspective, or a top-down god's-eye view. We looked at that and it didn't feel claustrophobic enough." The developers settled on a dingy side-scrolling perspective, with assets drawn in Photoshop and animated using Esoteric Software's Spine middleware, running on an engine created by Red Hook's first programmer, Kelvin McDowell.

One of the more intriguing challenges was to deliver recognisable fantasy-RPG classes while subverting them to both entice and disarm fans of the genre. *Darkest Dungeon*'s original four hero types – Vestal, Crusader, Highwayman and Plague Doctor – are, broadly speaking, a tank, a rogue, an offensive support and a healer, but they're also a corrosion of those concepts. The Crusader and the Vestal are zealots who won't form parties with classes they consider sacrilegious, for example, and that's before you factor in potential quirks and afflictions. "A kleptomaniac, alcoholic crusader knight is an interesting prospect straight out of the gate," Bourassa says. "When you hear 'knight', there's a nobility that seems intrinsic to that idea, and when it's stripped away, you're off balance."

Having proved its turn-based combat system with the game's first classes, Red Hook could be more experimental with subsequent designs. "I think the Leper is where things really came together, in terms of the left-of-centre concept ▶

and how we played that out mechanically," Bourassa explains. "He's tanky because he can't feel pain, but he's less accurate because leprosy affects your eyesight. He's got this mask on, and his breastplate is the idealised male torso, but underneath it he's falling apart. It's a bit of symbolism, a bit of off-kilter creative improvisation. For me, he's one of the most successful examples of us finding our sea legs."

Another breakthrough for Bourassa was the decidedly atypical bard equivalent, the malevolent Jester – a character that can rattle opponents with a rockstar kneeslide at the cost of exposing himself and jostling allies out of formation. "I don't like bards in games. I don't feel like they have a place. So it was a great opportunity to have some fun. How do we make a badass bard? Well, we make him like Slash from Guns N' Roses, right?"

Red Hook launched a Kickstarter for *Darkest Dungeon* in February 2014 with a target of $75,000, a goal it exceeded in two days. The game went on to attract over $300,000 in funding. One of the studio's more inspired calls was to enlist voice actor Wayne June to record the first trailer (released in October 2013) having listened to his sepulchral renditions of Lovecraft stories. After finishing the video, Bourassa and Tyler elected to bring June on board as the game's Ancestor character and narrator, an ethereal presence who cackles over your missteps like an especially malevolent dungeon master.

The Kickstarter success bought Red Hook another year to tinker with *Darkest Dungeon*'s fundamentals before launching on Steam Early Access in January 2015. Exploration, in particular, saw plenty of revision throughout the project's life – the studio toyed with an autowalk feature and struggled to balance the game's hunger system, whereby heroes accrue significant amounts of stress if they go without food.

Sigman was keen to avoid frustrating players too much in light of what he styles the "climate of negativity" around Steam Early Access at the time. "There had been a few high-profile games – I guess you'd say failures – that were ultimately disappointing, or they decided to stop development. We wanted your first experience to be very polished, and if it got a little rougher after that, well, that's OK because we've shown that we can do it right, if you just give us time."

In the end, *Darkest Dungeon*'s spell in Early Access would prove relatively smooth, with Red Hook adding new areas, classes, enemies and mechanics at regular intervals. How the game improved during its pre-release beta period is perhaps encapsulated by the gap between one of the game's earlier areas, the Weald, and one of the last to be added, the Cove.

Sigman is still a little unhappy about the former – he feels its population of barbaric outlaws and rapacious toadstool creatures offers too uneven a challenge. "On the one hand you've got the Unclean Giant, who can just annihilate a person with one blow, and then you've got the Crone who can be a really interesting foe, but if she's not grouped up the right way, she's just weak. And then you've got the Fungal Scratchers and Fungal Artillery, who are made to work together but if you get them independently they're a lot weaker.

"We both agree that the Cove is probably better, the strongest and most cohesive, but then it was the last one we did except for Darkest Dungeon. By that point we were in fighting shape, we had more mechanics to work with, because for pretty much every character we made we would introduce something new, so by the time we made the Cove we had a lot of colours to pick from." The Darkest Dungeon itself – a fleshy netherworld that calls to mind *Silent Hill* at its least hospitable – was Bourassa's biggest test. "I was at the bottom quarter of my gas tank at that point, but I knew it had to be good: extremely abstract, cosmic, big-scale stuff. That was an area that went through a number of different iterations."

While the game's reception was largely positive, some Early Access players were annoyed by its penchant for grinding, and its often merciless RNG. But the greatest trial by fire proved to be an update whereby slain enemies became corpses instead of vanishing, screening others from assault – a handicap that rendered a number of existing party strategies ineffective. Following a backlash, Red Hook made the feature optional, but Sigman feels that the problem was one of communication. "We were over-taxed and not engaging with the community as effectively as we could be, because Tyler and I were splitting the social media and community responsibilities, in addition to managing the company and making the game."

Officially released in January last year, *Darkest Dungeon* still has a long road ahead of it. At the time of writing Red Hook is finishing off the Radiant update, which allows players to shortcut 40-plus hours without lowering the difficulty in other respects. There's also the Crimson Court DLC, slated for this year, which allows heroes to become vampires and adds a roaming boss, the Fanatic, who may hunt the afflicted down in the field. Official mod support is planned, while other platforms remain "areas of interest".

These projects will bring their share of hardships, but if *Darkest Dungeon* teaches anything it's that a journey without hardship isn't a journey at all. "You don't have to be perfect," Bourassa concludes. "The road to success is windy and mucky. It's hard work and you'll have to make hard choices. There's no such thing as an ideal run, and flaws, as much as strengths, are what makes people who they are." ■



Tyler Sigman
Co-president and design director, Red Hook Studios

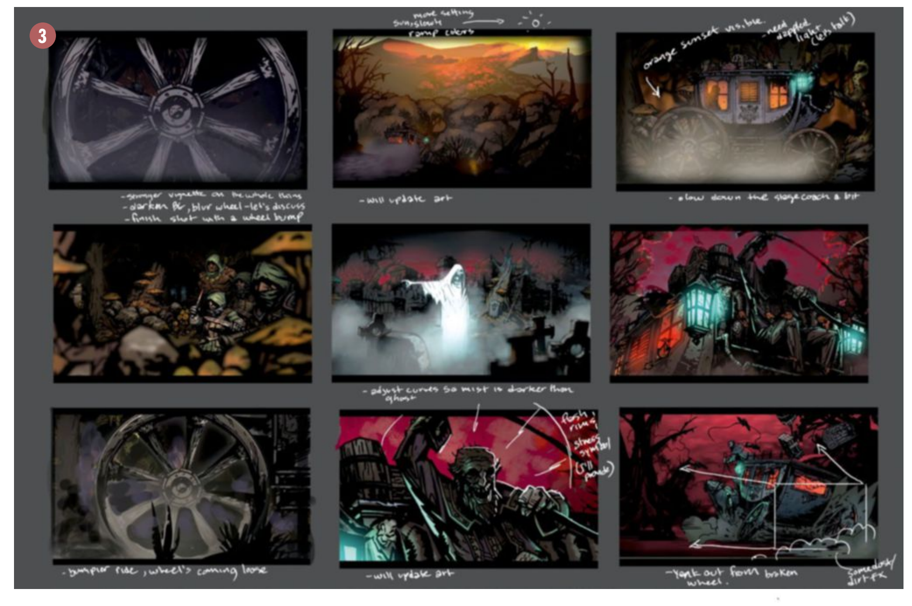
How closely does *Darkest Dungeon* today resemble your original concept?
It's surprising, but I guess all the evolutions of the game have been just sort of details within systems that we knew would exist. And maybe some iteration within subsystems, but surprisingly no giant pivots, like getting halfway through and thinking, 'We're barking up the wrong tree here.' It was just the hard work of making the vision a reality. We sort of had a map to begin with, and we never found ourselves off the map, it was just sort of cutting through jungle.

Which enemy was the most fun to design?
I've always loved that Skeleton Courtier so much. We were imagining that whatever happened when the Ancestor finally kicked things off, maybe there was a ball going on. And just this concept of the skeleton guy still wandering around with his goblet – *Darkest Dungeon* certainly isn't a slapstick game, but I love that humour can be found in this guy sitting there with his party cup. You think he doesn't look very threatening, and then he throws this goblet of unspecified liquid on you.

What was the most significant revelation during Early Access?
I don't think we were prepared for the size of the community we were going to have. It was an amazing surprise, and we had so many great proponents, some very helpful community members, that we were able to survive with just Chris and I handling it for a while. And also it was super-fun – to be able to directly interface with fans is just so neat. But ultimately we had to face up to the fact that we weren't offering the community a good enough service by being split so much between that and development.











1 Red Hook has avoided sexualised characters – there's no bikini armour to be found here – though Bourassa says the Grave Robber is designed to fit the "semi-seductive archetype". 2 Fast, agile and equipped with both blade and flintlock, the Highwayman is a flexible aggressor. Beware, though: his gallows humour may unsettle allies while camping. 3 *Darkest Dungeon* has only a few bespoke story sequences beyond its intro, but Stuart Chatwood's dynamic score tells a tale by itself, ratcheting up feverishly when light levels are low. 4 Bourassa's grim, chiselled designs reveal influences modern and antiquated – Mike Magnolia's Hellboy meets the Renaissance engravings of Albrecht Dürer. 5 The folk of the Hamlet will patch your heroes back up between missions and restore their sanity (somewhat), but the cost is steep – and you'll need money for food and torches on each expedition



FROM LEFT **Drinkbox co-founders Graham Smith, Ryan MacLean and Chris Harvey**

STUDIO PROFILE

DRINKBOX STUDIOS

Stickability, stress and creative courage: how a small studio finally established itself

By Chris Schilling



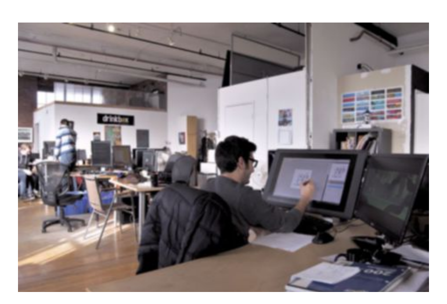
Founded 2008
Employees 12
Key staff Graham Smith (co-founder, producer), Chris Harvey (co-founder, technical lead), Ryan MacLean (co-founder, producer), Augusto Quijano (concept lead)
URL drinkboxstudios.com
Selected softography *Tales From Space: About A Blob, Tales From Space: Mutant Blobs Attack, Guacamelee, Severed*
Current projects TBA

The founders of Drinkbox Studios admit that it took some time to locate its niche. The Toronto-based indie was born from the ashes of developer Pseudo Interactive, best known for vehicular combat games *Cel Damage* and *Full Auto* and their sequels. In 2008, the Ontario studio was working on several games simultaneously, but when the axe began to fall for Eidos Interactive, its biggest ongoing project was cancelled and it was forced to close its doors. As soon as it became clear that the shutters were about to descend, a team of programmers discussed starting a new company. Ten staffers attended the first meeting. Gradually, that number whittled down to three as the rest dropped out.

"There were a few people that you'd hope to work with because you'd been through some projects with them and you knew what they were made of, so you knew what would happen if things got tough," **Chris Harvey**, Drinkbox's co-founder and technical lead, recalls. Along with producer **Graham Smith**, the two established the new company while a third potential founder, **Ryan MacLean**, promised to consider his options during a trip to Japan. "He was playing hard to get!" Smith laughs. Shortly after his return, MacLean agreed to join the others, and Drinkbox was born.

It would be three years, however, before it was in a position to release its first game. With little capital to support it, the fledgling firm had to work on a series of external projects (including *Marvel Ultimate Alliance 2* and *Sound Shapes*) to maintain a steady cashflow. This contract work was enough to support three new recruits, all of them from Pseudo Interactive. With a creative lead, an art director and another programmer, Drinkbox had a new team that could start to develop a new game, while the three co-founders concentrated on work-for-hire material. With more work offers coming in, the studio's desire to express itself creatively was at odds with its need to stay afloat. "In a way, it felt like a pet project or a side project," Harvey says. "Everybody on the team at one point or another during that period was on work for hire – sometimes there were no programmers on it, sometimes we had a programmer but there was no design work or art – so [development] was just kind of trickling."

The concept for what would eventually become *Tales From Space: About A Blob* was the product of a series of group discussions among staff, establishing a studio tradition that



Smith: "Fledgling studios have to offer something different, [otherwise] it's hard to get people talking about your game"

survives to this day. This particular conversation took place in Smith's family room: for the first six months of its existence, Drinkbox was operating from his condo, in an upstairs bedroom Smith had converted to an office. "I distinctly remember sitting on Graham's couches talking about it," Harvey tells us. "A lot of ideas got thrown out – one idea was about a blobby monster, and then other people on the team had different ideas. Our art director suggested a B-movie or a cheesy '60s vibe." Everyone agreed it should be colourful and light-hearted: a conscious pushback against the trend towards dark and grimy aesthetics in the big-budget games of the time.

After eight months, Drinkbox relocated to the basement of the same building it still occupies. Meanwhile, Sony had shown a strong interest in *About A Blob*, which was now headed to PlayStation Network as a PS3 exclusive. "We had experience developing on PS3 and Xbox 360 and, at that time, getting on Xbox 360 had become very difficult. With Sony – well, let's just say they were more open to it." Keen to eat into the lead Microsoft's marketplace had established, Sony's senior producer Rusty Buchert had been seeking more quixotic, inventive fare to showcase on the platform holder's digital service. "I think Rusty was trying lots of different stuff, because there were all these weird and interesting games that were coming out on PSN at that time," Harvey explains. "I guess he decided that we would be one of them."

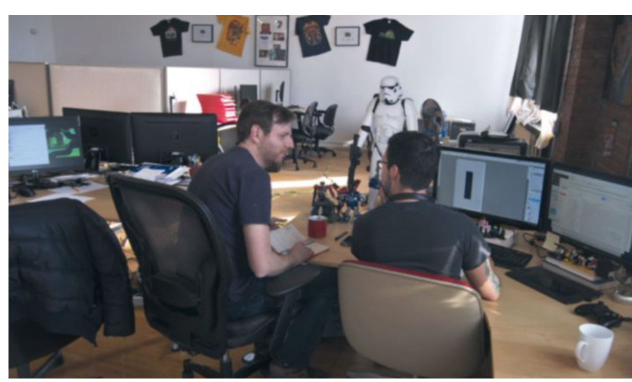
About A Blob finally launched in February 2011, and was well received, though Smith concedes "there were a lot of things we were unhappy about". Soon afterwards, Sony told Drinkbox that it was set to release a new portable console within the next 12 months, and the studio sensed an opportunity – not only to gain attention by producing a launch title for a new platform, but also to right the wrongs of its debut. A sequel was the most workable idea within that timeframe, but it still didn't leave Drinkbox much room for manoeuvre. Keen to avoid the disjointed development that had affected *About A Blob*, the studio expanded to a dozen staff.

But another idea had simultaneously captured the studio's imagination. Concept lead Augusto Quijano had produced a one-page pitch sheet for an isometric brawler that would later evolve into Drinkbox's biggest hit, the luchador-themed Metroidvania *Guacamelee*. Again, the team was split, with half the studio working on early prototypes for *Guacamelee*, leaving *Mutant Blobs Attack* understaffed for several months. "I think this is true of Chris as well, but about five months before we shipped that game, we both played it, and we both thought it was terrible!" Smith laughs. "We were freaking out." Harvey sheepishly corroborates the story: "It was September that we played the build, and I just remember my heart sinking. So basically everybody piled on to *Mutant Blobs Attack*, and I guess the whole energy of everybody working on it together managed to make it work. But it was very stressful. That's probably part of why, when we were about to release, we weren't sure how it would be received. Five months before, we'd been thinking, 'This is going to be a bloodbath!'"

"WE WEREN'T SURE HOW IT WOULD BE RECEIVED. WE'D BEEN THINKING, 'THIS IS GOING TO BE A BLOODBATH!'"

They needn't have worried. The game received a warm reception, with a review





"If you ask different people at the studio they'll each give you different answers for which game [of ours] they want to revisit!" Smith laughs. The Drinkbox co-founder suggests Switch could be a potential outlet: "It's a console that's well suited to the kind of games we make"

average that was beyond the most optimistic internal hopes. "Whenever we get close to the end of a project, one day I'll come in and say to Graham, 'What's our Metacritic?'" Harvey laughs. "I thought, 'You know what? I think this game can break 80,'" Smith replies. "But that was with my fingers crossed. [The score] was way above what I expected."

By the time *Mutant Blobs Attack* launched, Drinkbox already had a vertical slice of *Guacamelee* to show to publishers, though no one was biting. Smith recalls one offering a scathing assessment that it looked like a Flash game, while others simply didn't understand the concept behind the game. "I specifically remember feedback from one publisher – they basically said a game with luchadors had recently got terrible reviews," Harvey says. "So they weren't interested in this one." When former partner Sony came in with an offer from its Pub Fund programme that the founders considered too low, they knew they needed a better pitch. Drinkbox took the game to PAX East in 2012 for an early public showing, and the audience response was glowing. "A lot of people were interested in talking to us after that," Smith grins.

A cash injection from the Canada Media Fund together with an improved offer from Sony meant Drinkbox could self-publish for the first time. It was a landmark moment for a studio that had previously been forced to keep one eye on the balance sheet. "For the first couple of projects, we were constantly asking, 'What is our minimum return at the end of this? What can we do to maximise that minimum return, just to survive?'" Harvey says. "The number-one fear was that we'll put too much money into a game, it won't do well, and then the company will be gone. Our general feeling was backed up by other people we talked to – that it's important to keep kicking that can, and put yourself in a position where you can survive project to project in the hopes that eventually you'll start to figure it out, and things will start to turn profitable."

Guacamelee was a hit, and an enhanced version – the *Super Turbo Championship Edition* – arrived on PlayStation 4, Xbox One, PC, Xbox 360 and Wii U the following year, before work began on what Harvey says was Drinkbox's toughest project since its debut. *Severed* was another Augusto Quijano proposal, and was originally devised as a relatively short palate cleanser. "It was supposed to take maybe ten months, with part of the team, while the rest worked on preparing the next project," Harvey explains. "That didn't happen." In fact, development of *Severed* took more than twice as long as the original plan. A demo, showcased at Sony's PlayStation Experience in 2014, was greeted positively, but expanding a 15–20-minute slice into a six-hour game while avoiding repetition was proving troublesome. "It felt too much like the original *Punch-Out*, where if you figure out the attack pattern, you're done with that guy. But in our game you were going to end up fighting that [enemy] around 50 times. And you don't want to fight Glass Joe 50 times!"

Unwilling to break the bank for a single game, Harvey admits that some difficult conversations took place: "We were so stressed about the state of the project and kept asking ourselves, 'What if we just tied it up and shipped it in a month or two from now?'" But the desire to maintain the studio's reputation meant *Severed* was pushed back to accommodate extensive tuning to the flow of combat, and a few new monster variants. A few negative reviews acknowledged the problems Smith admits still concerned him when the game shipped, but others rated it as the studio's best game to date.

Its mournful tone might set *Severed* apart from its predecessors, but it has one thing in common with previous Drinkbox games: its completion stats are further proof of the developer's ability to hold the attention of its players to the bitter end. "One of the reasons *Severed*'s development took so long is that we try to make sure that we're never retreading the same ground in our games," Smith says. "I think as a side effect of that we're able to keep players around for longer." Harvey, meanwhile, believes the secret lies in "moments of delight – where the player knows to expect a certain thing, and it's at that moment that the designer flips it around on them".

"THEY BASICALLY SAID A GAME WITH LUCHADORS HAD RECENTLY GOT TERRIBLE REVIEWS, SO THEY WEREN'T INTERESTED"

The studio's keenness to maintain the high standards it has set for itself may have occasionally taken a toll. Still, as anyone who's conquered the formidably tough El Infierno levels of *Guacamelee* will doubtless verify, Drinkbox Studios is a developer that clearly relishes a challenge. The kind of determination and perseverance players must demonstrate in mastering its games is deeply embedded in the studio's DNA. It's that very tenacity that's enabled it to survive – and, more recently, to prosper – in an unpredictable and competitive market. ■



1 *Guacamelee*'s world-switching mechanic was originally part of a pitch for a scrolling shooter. 2 *Mutant Blobs Attack* indulged Drinkbox's passion for visual gags, with nods to *Angry Birds*, *Portal* and *Katamari Damacy*. 3 *Severed* was more divisive than its predecessors, but it had plenty of fans and was named 2016 iPad Game Of The Year. 4 Despite its failings, the breezily entertaining *About A Blob* was a fine debut for the studio

PLAY

REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Resident Evil 7: Biohazard PS4
RE7's two Banned Footage DLC packs offer a few good reasons to return to the Baker plantation, even if the overall quality is somewhat mixed. The highlight of the first is Bedroom, a fraught room-escape puzzle which expands the base game's catalogue of cinematic influences to include Stephen King's Misery. Pick of the second is Jack's 55th Birthday, where you must collect food for the ravenous patriarch while fending off monsters in an inventive riff on the *Resi* series' staple Mercenaries mode.

Fire Emblem Heroes iOS
As seasoned *Puzzle & Dragons* players, we were less concerned than most by DeNA and Nintendo's adoption of gacha payment mechanics for *Fire Emblem*'s mobile debut. Sadly, it's precisely that *PAD* experience that has turned us off a deeply disappointing spin on Intelligent Systems' classic series that, with its single-screen maps and small party size, is almost entirely missing what makes *Fire Emblem* tick. Still playing, then, but only for a little while before uninstalling.

New Super Mario Bros U Wii U
Going back to *New Super Mario Bros U* after playing *Super Mario 3D World* with the **Edge** brood reveals the surprisingly mean-spirited nature of Mario's Wii U debut. The difficulty ramps up quickly, but there's no sense of a smooth curve here. And we've little patience for its clunky save system today. All of this, combined with a visual treatment that hasn't weathered well, makes for a rather unpleasant return trip.



Explore the iPad edition of Edge for extra Play content

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PS4

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PC, PS4, Xbox One

119 Aeero
PC, PS4, Xbox One

121 Dexed
PSVR, Vive

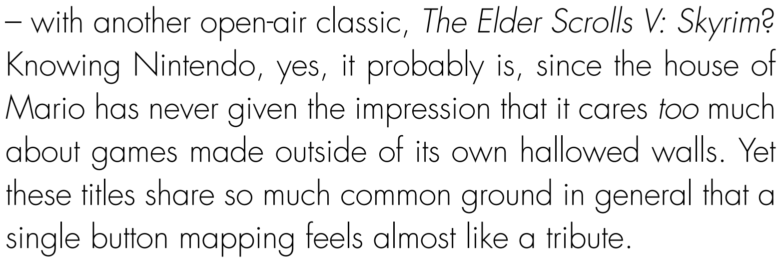
123 Dandy Dungeon
Android, iOS

Button fashion

We often wonder how much thought goes into button layouts. Not in terms of comfort, you understand, or suitability to the task at hand – that much is obvious. Rather, it's about the message they can send.

When Bungie modelled *Destiny*'s control system not on that of its own *Halo* but on *Call Of Duty*'s, it felt instructive. This was a game designed to appeal to fans of the biggest-selling shooter on the market, that had designs on claiming that title as its own. It may not quite have worked, but it had nothing to do with which button you hit to reload. This month's Play crop has us thinking once again about the hidden messages behind the humble button config.

Take, for instance, *The Legend Of Zelda: Breath Of The Wild* (p104), the first of Link's adventures to be set in a truly open world. Is it coincidence, then, that its control system shares an unusual mapping for jump – X, the uppermost face button – with another open-air classic, *The Elder Scrolls V: Skyrim*? Knowing Nintendo, yes, it probably is, since the house of Mario has never given the impression that it cares *too* much about games made outside of its own hallowed walls. Yet these titles share so much common ground in general that a single button mapping feels almost like a tribute.





Buttons can also have the opposite effect. To put it politely, Team Ninja's *Nioh* (p112) draws no little inspiration from *Dark Souls* and *Bloodborne*. Yet it's equally a game inspired by its studio's own past, especially the thrilling action of Tomonobu Itagaki's *Ninja Gaiden* games. It's that series on which *Nioh*'s control system has been modelled. Light and heavy attacks are on the face buttons, not the shoulders, the game subtly telling you from the off this is no mere *Souls* ripoff. Unless you head into the menus and select Control Type B, that is. In that case, our argument rather falls apart.

The Legend Of Zelda: Breath Of The Wild

The shrines, it turns out, are just the beginning. Ever since our first play of this sprawling adventure, we've been working to the assumption that these short, taut puzzle dungeons would be *Breath Of The Wild*'s focal point. And that's true, to an extent. Nintendo has studded its largest-ever game world with over 100 shrines; they're self-contained, subterranean chambers that are a vital component of Nintendo's first open-world game, serving as tutorials, pacing devices, fast-travel points, signposts, landmarks – and puzzles. Yet they are by no means the sole expression of *Breath Of The Wild*'s desire to tax the grey matter. There are puzzles, by the dozen, above ground too.

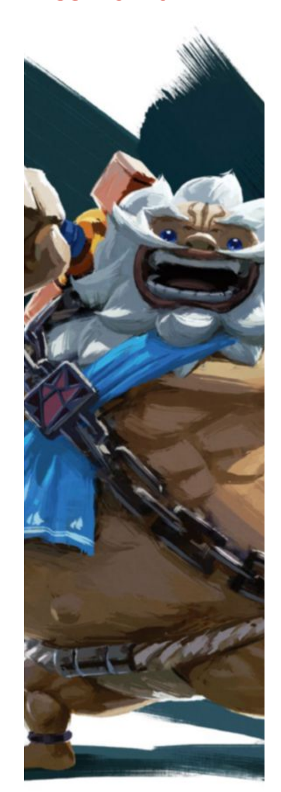
That hoary old open-world cliché now needs to be updated. See those mountains on the horizon? You can go to them, yes, but it is not a simple matter of setting a map marker and following a GPS route. Heading to a mountain-top shrine you spotted from a mile or two away, you find yourself divided from your destination by a large ravine. Do you cross it using the bridge you can see on the horizon off to the west? Do you paraglide across and grab the cliff on the other side, gambling that your stamina wheel will last long enough to take you to the top? Could a cliffside tree be chopped down and serve as a bridge? Or do you head east, where the landscape might elegantly curve round, along a mountain path straight to the summit?

Whichever route you choose, chances are you'll get dragged farther off course along the way. There might be a bandit camp to clear out, a wild horse to break, an irresistible peak to scale, or a curious arrangement of stones that you simply can't leave uninvestigated. A traveller might hint at a nearby treasure; a bard, standing on an outcrop playing an accordion, may sing of a secret shrine that only appears under certain conditions. Perhaps you'll happen across a stable and spend some time by the stove, cooking restorative meals and brewing stat-buffing elixirs, selling unwanted ingredients to Beedle, the nomadic merchant who has a remarkable habit of always knowing exactly where you're going to pitch up. Then maybe you'll stay the night in a comfy bed for the temporary health boost it gives you. The next morning you'll saddle up, head off and, with any luck, remember what it is you came here for in the first place. This is a game where you always have somewhere to go, and sometimes even make it there.

Dozens of hours later, we're still not quite sure how Nintendo has done it. A land this full of puzzles, secrets and innumerate distractions should, by rights, feel contrived, as if it has been built according to metrics, rather than instinct. A shrine here, a stable there, a battle there; lather, rinse and repeat until player reaches objective marker. Yet this colossal game world has been given room to breathe, despite the volume of things to do it contains. And, for all its fantasy, it feels natural.

Developer/publisher Nintendo (EPD)
Format Switch, Wii U (both tested)
Release March 3

This colossal game world has been given room to breathe, despite the volume of things to do it contains



It snows on high ground, is hot in the desert, and rains in the wetlands, while wind buffets the coastlines. It feels like a place, albeit one in which cooking up monster parts yields an elixir that quietens your footsteps, where you can fry an egg on the volcanic ground, and where tree sprites hide behind easily missed, bite-sized puzzles, expanding your inventory when discovered.

This world is an absolute, and unremitting, pleasure to get lost in – but at some point you'll get around to taking on the main quest. Calamity Ganon has been sealed away in Hyrule Castle for 100 years, but his power is growing; he's taken control of the four Divine Beasts, hulking mechanical constructs that, corrupted, are causing merry hell in the regions they once protected. One has caused incessant rain to fall, and a local dam is about to overflow; down in the southwestern desert, citizens live under constant sandstorms. At the urging of the four tribal elders, Link must free the Divine Beasts of their corruption, returning them to their rightful owners so they can assist him in the final assault on Calamity Ganon.

Each involves an errand or two, a set-piece mission to gain entry to a Beast's innards, a smartly designed – but short – dungeon, and a boss fight. The inside of a Divine Beast, while certainly bigger than a shrine, is no traditional *Zelda* dungeon. The spaces are bigger, and more intricate, than they first appear, since Link has control over them – one example has three central sections that can be individually rotated, changing the layout – but they're hardly the sort of complex network of puzzle chambers we've come to expect from the *Zelda* series. And it means that this, the biggest game Nintendo has ever made, can be broken down into just five constituent parts – reclaiming the four Divine Beasts, and the final assault on Hyrule Castle. The concerted player, with a laser focus, could rattle through that lot in 20 hours.

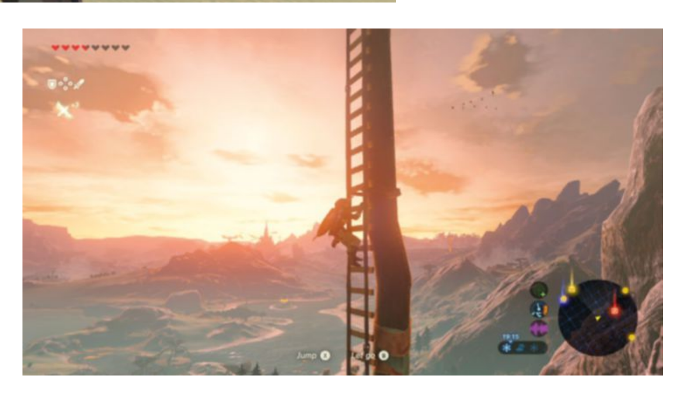
Yet that merely speaks to the extent to which *Breath Of The Wild* casts off the shackles of its series' history. Nintendo has spoken of its desire to hit the reset button with a series that had become too rigidly adherent to a decades-old template. Link's 3DS outing *A Link Between Worlds* hinted at the company's desire for a change of structural pace, with an item-rental system letting you take on the dungeons in the order of your choosing. Here, Nintendo goes even further. By the time you've completed four shrines in the Great Plateau starting area and used your reward, the paraglider, to float on the breeze to the world below, you'll already have every power you need to go anywhere and do anything. The Sheikah Slate on Link's hip will let him control metallic objects with Magnesis, freeze others in place with Stasis, or summon bombs on a cooldown. He'll have a sword, a shield, a bow and arrow. Nintendo's *Zelda* ▶

ABOVE Some weapons confer an elemental bonus on hit, but use them carefully: they, too are susceptible to the durability system. LEFT Those early rumours of Link being a girl didn't come to pass, but you've never had so much control over his appearance. You can cross-dress if you want to, too. BELOW It may not boast the most detailed textures, but this is an astonishingly pretty game at times that doesn't even need the pastel hue of a setting sun to present a scene worth soaking in





ABOVE Each reclaimed Divine Beast trains a laser on Hyrule Castle, primed to strike when you finally make your assault on final boss Calamity Ganon



Paragliding is the best way to get around. Horse travel is fast, sure, but nags can't fast-travel with you. You can pick them up at any stable, but the last time we saw our steed it was hanging around halfway up a volcano

design ethos has for decades involved a slow dripfeed of new, mission-critical items and abilities building up to a final battle dozens of hours later. In the weeks and months to come, speedrunners will work on finding the quickest way to sail down from the Great Plateau, and head straight to Hyrule Castle to face Ganon.

Taking your time is, of course, rewarded, and not just with the many delights that are hidden around this improbably large stage. Free a Divine Beast, and you'll be granted a new ability, each on a lengthy cooldown designed to offset the way it fundamentally breaks the rules of the gameworld. To say much more is to spoil the surprise, but suffice it to say that one suddenly makes traversal a (literal) breeze, while others thumb their noses at a surprisingly punishing combat system, where even seemingly low-level enemies can rob your life bar of half-a-dozen hearts. There are other, more granular benefits to be found elsewhere: completing a shrine nets you a Spirit Orb, four of which can be exchanged at prayer sites around the world for an extra heart container or extension to your stamina bar. And throughout you're slowly amassing more powerful gear, discovering the NPCs that will power it up still further, and building up a healthy stock of restorative items. Weapons will break and tough fights will burn through your healing items, but there's a steady sense of progression, however you choose to order your journey through this remarkable world.

There are problems, inevitably, but none is disastrous and all can be mitigated by the game's generous suite of systems. The framerate on the Wii U version is a little uneven, dropping into the teens during particularly busy scenes – floating down to a village during a rainstorm, for instance – but rarely intrudes when it counts. Combat, meanwhile, can be unpredictable, the timing window for a perfect dodge oscillating between a tiny opening and a generous chasm. You'll be hit by things you swore you'd dodged, or when the camera position interprets your intended backwards jump as a sideways one. But if the melee stuff is proving a chore, just chuck a bomb in there. Use Magnesis to smack them silly with a big metal box. Use Stasis to freeze them in place; draw your bow and pick them off with elementally empowered arrows; or retreat, move to higher ground, glug a stealth elixir, then sail down behind their defences and pick them off one by one from the shadows. The magic of being given all the tools within the opening hour is the knowledge that the solution to any problem is already at your disposal, and that you can always change tack. And if all gets too much, you can simply turn around, point yourself in the compass direction of your choosing, and go somewhere else. There, chances are, you'll find magic.

The result, for all the longevity of its series and the familiarity of the open-world genre, is a game that evokes feelings we haven't known for 20 years. Not since *Ocarina Of Time* have we set foot in a world that seems so mind-bogglingly vast, that feels so unerringly magical, that proves so relentlessly intriguing. Plenty of games promise to let us go anywhere and do anything; few, if any, ever deliver on it so irresistibly. Nineteen years on, *Ocarina* is still held up as the high-water mark of one of gaming's best-loved – and greatest – series. Now it may have to settle for second place. **10**



WILD THING

The move to an open world has forced Nintendo to rethink its approach to audio; with no control over how the player moves through the world, a linear audio track no longer works. The result is a beautiful dynamic score that steadily builds – new layers flow into the mix as you progress through the innards of a Divine Beast, for example – but is at its best when nothing's really happening. The soft whistle of the wind, the rustle of tall grass, the barks and chirrups of nearby wildlife, and the persistent, gentle clank of the items in the jogging Link's backpack: this is game audio of delightful subtlety, and a key component in the rich sense of place that permeates this bewitching vision of Hyrule.

Post Script

Unearthing the magic of a very Nintendo open world

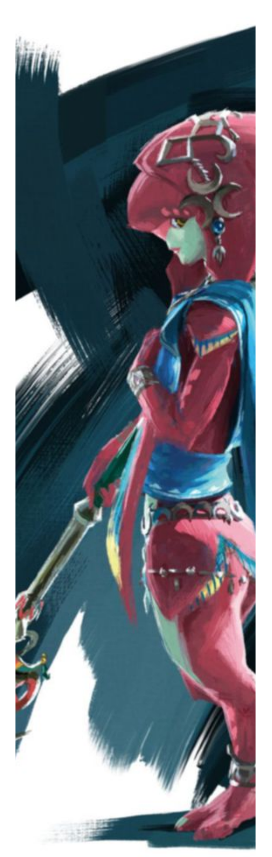
Let's hear it for the Koroks. Early on in *Breath Of The Wild*, as you head up the hill to a village, you happen across a sobbing spirit, upset because its maracas have fallen silent. Bandits, it transpires, have stolen the Korok seeds from inside them; seek one out, the spirit pledges, and it will expand your inventory by way of thanks. Storage space is at a premium early on, so while you're amassing sidequests from passers-by at a lick, this one feels worth prioritising.

When you reach the village, you spot something curious at the entrance of the elder's house: a row of statues, each with a ceremonial dish at their base. All but one have an apple inside. You forget about your quest for a moment – a recurring theme, this – and drop in an apple from your inventory. Out pops a tiny sprite, introducing himself as a Korok; he gives you a seed, you return it to the quest giver, and choose which category of inventory you'd like to expand. Five slots, perhaps? Ten? No. One. Bring more, the spirit urges you. Suddenly you realise there must be dozens of these seeds out there, and that you're now hunting for a set of the world's smallest needles in a haystack the size of a small country. It feels impossible.

Then they just sort of... arrive. After a botched attempt to glide between mountaintops sees us clamber desperately to a nearby ledge, we round the mountain's corner and find ourselves on a path. Nearby, something seems a little off, and we head over to investigate. Moments later, out pops a Korok, and we have another seed. Who put this here, and why? Was it a reward for the sort of painstaking completionist who combs every square inch of the map, leaving no stone unturned? A reward for those who buy the strategy guide? Or did a member of the design team look at the two mountains and predict players would try to paraglide between them only to mess it up, and thus need a ledge to scurry for, a path to get them back on their feet, and perhaps a little reward to sweeten the pill of failure?

This is *Breath Of The Wild*'s magic in microcosm. The Korok seeds are, in theory, the worst sort of collectible: tiny things strewn seemingly at random across an enormous world. The solution in many open-world games would be to have a merchant sell a pricey map (perhaps, if we're feeling cheeky, for real-world money) that reveals their locations. Yet that's a decision born of a very different kind of open-world design. Ubisoft builds *places* – the Florence or London of an *Assassin's Creed*, the San Francisco or Chicago of a *Watch Dogs* – then designs a game within them. This is Nintendo's first open world, and it has come at this oversubscribed genre with a very different attitude. Open worlds are sandboxes for players, certainly. Yet to Nintendo, they're sandboxes for developers, too, a chance to break free of the overworld-and-dungeons structure that has defined *Zelda* for decades. The result is a land that, for all its nonlinear freedom, feels not just built but also uncommonly tightly designed.

> During our final assault, we had to hunker down in cover for five minutes waiting for a rain shower to pass



Genre staples are mined for novel design opportunities, giving fresh spins on established conventions. Cooking is fun, playful, and rewards logical experimentation. Variable weather is par for the course these days, but Nintendo works to ensure that even the climate is a mechanic. Extreme temperatures will drain health without the correct clothing or a mitigating elixir. During our final assault on Hyrule Castle, we had to hunker down in cover for five minutes while we waited for a rain shower to pass, since water makes climbing impossible. On the approach to Goron City, the volcanic climate will cause any wooden weapons on your back to catch on fire. And if a thunderstorm strikes up, you have a few seconds to unequip anything metallic before you're faced with the Game Over screen.

A guiding principle for *Breath Of The Wild*'s development was that puzzles should be able to be completed in multiple ways, a necessary tactic when everything can be approached from any angle. The towers – another genre staple, looming high in the sky and revealing the local map once scaled – are a case in point. The climb itself is simple enough, with generously placed ledges ensuring that even those without an upgraded stamina wheel can safely make their way up. But the real challenge is getting there. First you must find them – they're not marked on the map – and then you must work out how to pass the obstruction at the base. One is walled in by frozen rocks; another is surrounded by floating enemies that will follow you up the tower if you try to bypass them. Another is patrolled by Guardians, the toughest enemy type in the game, blessed with 1,500 health points and a laser that's a one-shot kill. Reach the top and the map fills in, but there are no icons, beyond the shrines and towns you've already discovered. There are road markings and area names. But the rest is up to you.

We've tried, over the years, to get Nintendo executives to talk about other companies' work. The house of Mario has long cultivated the impression that it's profoundly uninterested in what goes on outside its own walls. *Breath Of The Wild* producer Eiji Aonuma admits that younger members of the team play lots of games, and studied other open worlds in preparation. Yet this is no copycat work. Rather, the design teams have studied the competition, identified the genre's staples, its peccadilloes and its problems, and addressed them with the same flair that goes into a *Mario* or linear *Zelda* game. The results are breathtaking. ■

Horizon Zero Dawn

That *light*. Milky peaches and pinks seem to bathe the world rather than simply illuminate it, while searing reds, yellows and blues assault the screen every time you point the camera vaguely in the direction of the sun in what must be the most unapologetically overwrought lens-flare effect ever committed to a videogame. At night, limestone greys and damp-mossy greens dominate while ghostly, moonlit silhouettes are picked out in the rolling mist. It's immediately obvious that *Horizon Zero Dawn* shares DNA with Guerrilla's *Killzone* series via the Decima engine, which powers both, but the tech finds even greater potency in this new, more naturalistic setting.

And what a setting. *Horizon*'s post-apocalyptic wilderness is sprawling but intricate, taking in vast deserts, dense forests, ruined cities, and snow-covered mountains. It's an extraordinary landscape that evokes aspects of *The Elder Scrolls V: Skyrim*, *The Last Of Us*, *Enslaved: Odyssey To The West*, and even *Red Dead Redemption*, but it never quite feels like somewhere you've visited before.

Much of this is down to the herds of indigenous robotic dinosaurs that call the wilds their own. Broadheads graze while raptor-like Watchers patrol like particularly vicious shepherds, lights from their heads illuminating the unfamiliar flora underfoot. Hulking Tramplers, which congregate in desert areas, destroy rock formations and trees when charging at you. Scrappers scavenge from fallen beasts and other machinery, flinging energy projectiles at you when you get too close. And the sight of a Tallneck – a cross between a giraffe and the Starship Enterprise – cutting through the mist is nothing short of majestic.

These sentient machines – or at least their ancestors – were created by humans thousands of years ago and appear to be tightly bound to whatever caused the world to collapse. But in among the ruins of one civilisation, another has sprung up, constructing settlements and forts from wood, cloth and recovered metal to guard against the mechanical apex predators that prowl beyond their rudimentary walls. Protagonist Aloy's tribe, the Nora, is a matriarchal society (see Post Script) which shuns technology and appeals to magic and gods. This particular group of well-meaning Luddites is a little heavy-handed, and Aloy is branded as an outcast and shunned by the others even as a child. She lives with fellow outcast Rost – a man with a deep respect for the Nora's traditions and rituals, despite his own rejection from the tribe – who trains her in the art of survival and piety. Headstrong Aloy, however, isn't quite so zealous and holds little truck with any laws that forbid her to explore or learn about the world.

As a child she stumbles on a device created by The Old Ones entombed in the remains of one of the towering buildings they constructed. Called the Focus and worn in front of her ear, it gives her the power to scan environments and robots, picking out points of interest, vulnerable or volatile components, and even revealing the AI paths of creatures – a useful tool when it comes to making your way through a dangerous herd to get close enough to an animal for a silent takedown, or to reprogram it as a loyal mount. The Focus also allows Guerrilla to introduce a surprising element: investigations. Throughout the course of the game's spiralling Machiavellian plot you'll encounter crime scenes in which evidence must be gathered, and trails that must be picked up and followed to whatever revelation they lead. It's a simple but robust addition in which *LA Noire*'s yellow evidence markers are replaced by an agitated mass of digital triangles, and it's one that allows the studio to construct rich, localised stories from just a handful of components.

Developer Guerrilla Games
Publisher SIE
Format PS4
Release Out now

The Focus device allows the studio to construct rich, localised stories from just a handful of components

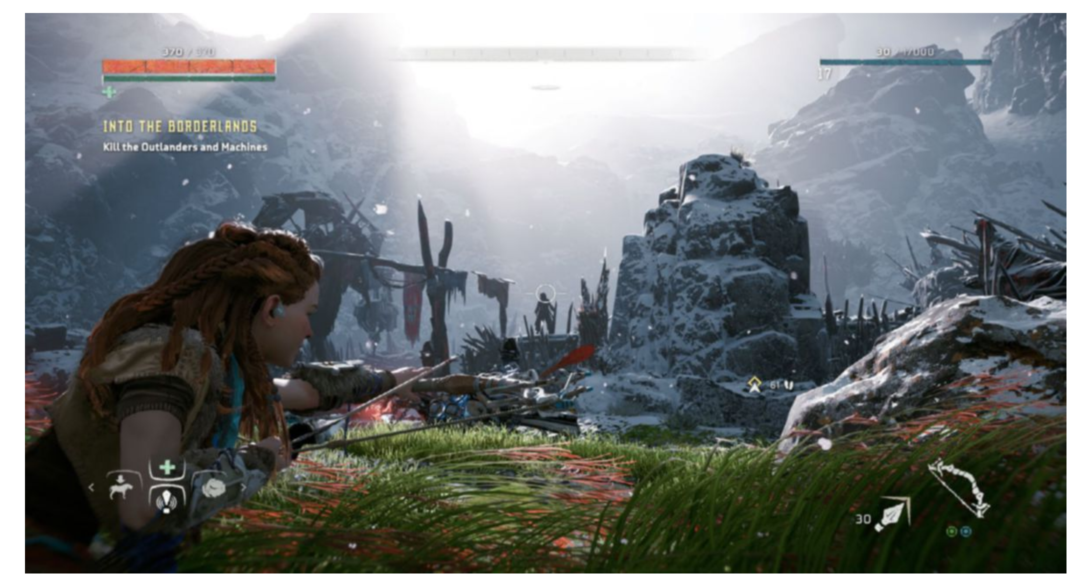


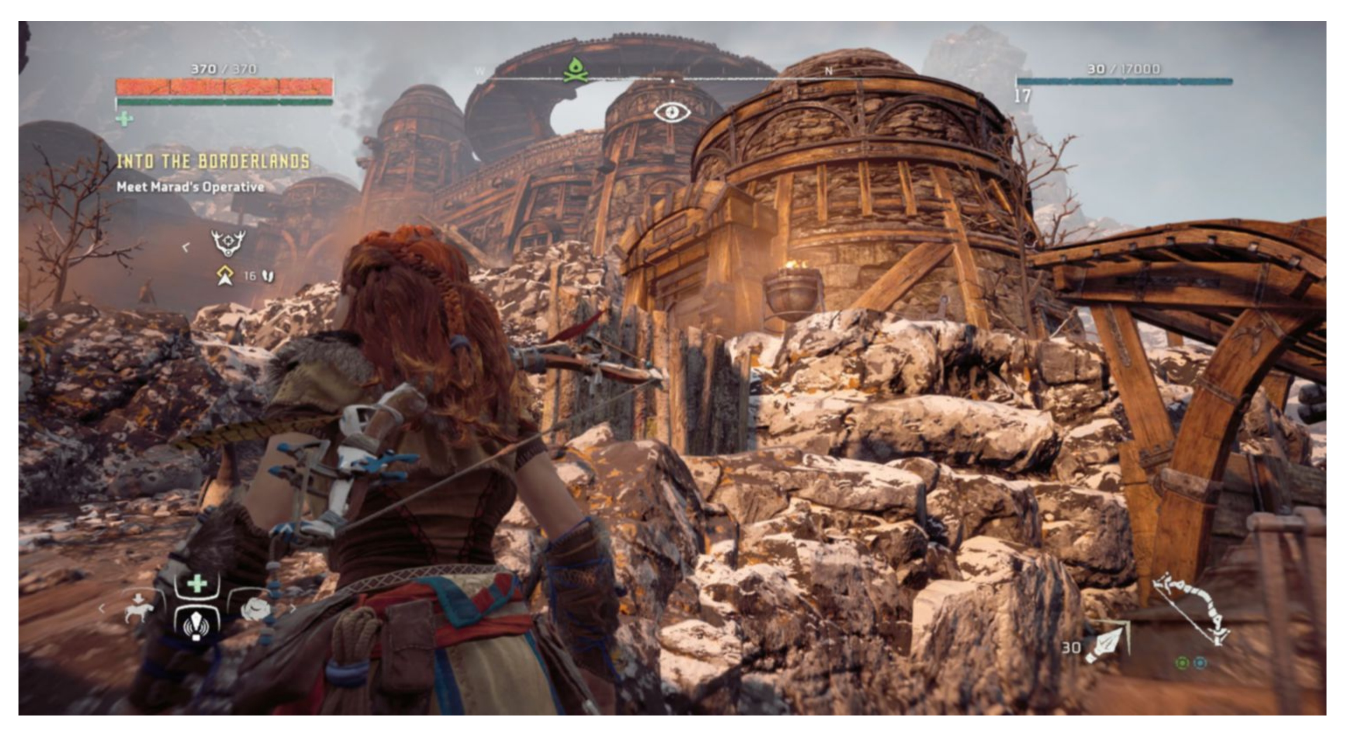
Aloy is a keen detective, but she is much more at home hunting big game or clambering up rock faces out in the open. She's beautifully animated, and there's a weighty sense of connection to the world in all of her movements. Hunting requires you to get in close to your quarry without startling it and without attracting the attention of any watchers, which will immediately pounce on you. Aloy can target specific components of creatures with her bow or go in for the kill with her staff. Strong and weak melee attacks are complemented by critical hits that can be launched while standing next to a stunned machine, and you can even turn some creatures against their companions once you've learnt how to override their systems.

Fighting the more aggressive strains of machines is exhilarating, and successfully defeating larger robots requires you to make full use of Aloy's available tools. You can use the Focus to reveal elemental vulnerabilities and highlight weak spots in yellow. Clicking R3 while aiming the bow will slow time for a few seconds, allowing you to focus on disabling shields, dislodging armour panels or removing a machine's offensive capabilities. And you can place traps and explosives in the field, while a slingshot weapon allows you to hurl various elemental grenades. There are also two types of Caster: Rope and Trip. The first of these allows you to temporarily tether enemies to the ground, and if enough lines are attached you can topple them and move in for a couple of critical strikes before retreating back to a safe distance. The Tripcaster, meanwhile, can be used to lay electrified tripwires that stumble and stun enemies.

You switch between these various tools by holding L1 to open the weapon-selection wheel – doing so also slows time to a crawl – and if you have the necessary ingredients you can craft ammo for each of your weapons from here, even in the heat of battle. In some situations, environmental hazards can be used to your ▶

RIGHT You can buy specialised bows from traders that can fire elemental ammunition or are particularly good for sniping. MAIN *Horizon*'s settlements are a joy to discover and explore, and are teeming with life and detail once you get inside. You're safe from robot attacks within their walls. BOTTOM Targeting Blaze canisters with fire arrows will cause a devastating explosion









ABOVE The yellow lights on these Watchers denote that they have been alerted by a noise and are searching for us. Aloy can hide in long grass, but also in the shadows and behind downed machines if need be

Horizon's **world features colossal tracts of land, which are home to roaming herds of robots, natural resources, wandering traders and bandits, and more besides. Despite all this open space, you're never far from something to do**

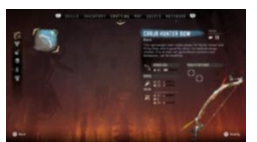
advantage – shooting out the supports of precariously balanced piles of logs, for example – while human and robot enemies will fight each other, too.

There's also a selection of cobbled-together guns, including the Rattler – a short-range hybrid of shotgun and machine gun – and a firework-flinging hand cannon called the Firespitter. You can bring overridden steeds into battle with you, too, and mounts can do damage with some painful-looking front and rear kicks, but they're fragile in the face of larger enemies.

Many of the quest missions see you going into battle with allies by your side, though stealth still plays an important role – in every case you're given the chance to enter situations alone first, sneaking through long grass to pick off as many robots, bandits or enemy tribe members as you can before the alarm is raised and all hell breaks loose. Human-on-human combat isn't as enjoyable as tackling the machines, since there isn't as much dynamism involved, but once Aloy is levelled up enough you can cut swathes through groups of enemies in a way that's satisfying, if not particularly engaging.

Character design throughout is exquisite, however. Decorated with animal furs, found tech, dreadlocks, blue face paint, and Aztec-flavoured jewellery, each new individual is a pleasure to encounter. Visually, at least: while the main characters are, for the most part, well-performed, the quality of voice acting drops off steeply once you start dabbling in the game's deep pool of side missions and distractions.

Sidequests present themselves regularly as you encounter all manner of stricken individuals throughout the world, but there are also random events such as rescuing people from a bandit or robot attacks, or



CRAFT WORK

Aloy must gather the resources she needs to craft ammo and potions, expand her carrying capacity, and upgrade her kit and weapons. While many components can be stripped from fallen robots, or found in storage crates, you'll also need to hunt live game to acquire skins and meat, and develop a keen interest in the local plant life in order to gather wood for arrows, ingredients for health and resistance potions, and to keep the small medical bag you carry for quick healing topped up. Bonfires dotted about the world can be lit in order to save progress, and once you begin crafting travelling kits you can use any of them as fast travelling points.

opportunities to ambush bandit-hunting parties. Despite the size of the world, Guerrilla has resisted the temptation to make these events too frequent and in dozens of hours of play we've seen very little repetition. Bandit camps can be found around the world, and clearing them will see locals move into the settlement once the area is cleaned up. Hunting Grounds missions set specific challenges – dislodge ten Blaze canisters as quickly as possible, for example – and help Aloy to accelerate the acquisition of new skills. Tallneck quests set vertiginous platforming challenges in which you must first figure out how to climb onto the towering beasts, and then scale them to acquire their data. Corrupted Zones, meanwhile, must be cleared of virus-infected robots. Aloy is never short of things to do and, blissfully, there are no arbitrary collectables to hunt.

Horizon: Zero Dawn is an enormous, ambitious curveball from the studio behind the promising but perennially flawed *Killzone* series. In Aloy, the game introduces an enchanting protagonist and sets her on a remarkable adventure that steers clear of rote sci-fi. It takes place in one of the most beguiling game worlds in recent memory, and the whole thing is paced with the kind of deep, grin-inducing combat befitting a dedicated brawler. While the dialogue doesn't always strike the right tone, and some ill-judged boss battles later on can feel more like a slog rather than pleasure, Guerrilla's vision for an open-world action RPG never imposes on your time or runs out of fresh ideas. *Horizon* emerges as a graceful, intoxicating and often surprising adventure.

9

Post Script

Why Guerrilla's fictional matriarchal society sets a new standard for videogame narratives

Last year, Sony president of worldwide studios Shuhei Yoshida revealed that concerns were raised internally about the potential risk of launching *Horizon* with a female lead. Guerrilla, despite moving outside of its FPS comfort zone, stuck to its guns.

Aloy is fierce, determined, outspoken and dressed for the weather. But she also has real personality and characterful flaws. Her backstory, which sees her rejected from her tribe for not having a mother, and craving the familial bonds that she is forced to watch other children enjoy from a distance, is a moving one, but it feeds into who she grows up to be – a highly capable survivalist and warrior who is both kind-hearted and selfless. None of these character traits have anything to do with her sex, however, and the fact that she is a woman is an attribute that feels refreshingly incidental when it comes to what defines her character.

But Aloy's sex does have pointed relevance in *Horizon*'s story, and within Guerrilla's fictional matriarchal society. Motherhood is sacred in this world, and to be without that bond is tantamount to a sin. Aloy's very personal problem results in the shunning she experiences growing up, and drives her to become self-sufficient. These traditions are upheld by the trio of female shamen who lead the Nora tribe in worshiping All Mother, a fertility goddess who they believe gave new life to the world after the apocalypse. While one of the three has a soft spot for Aloy, and steps in as a distant mother figure sporadically, in a community so driven by the concept of maternity the cause of Aloy's pain and rejection is thrown into even sharper focus. Her desperation to find out who her mother was, and her subsequent search for that information, triggers the cascading events that take her well beyond the Nora tribe's small patch of land.

The fact that Aloy is a woman is an attribute that feels refreshingly incidental when it comes to what defines her

But convincing female characters aren't confined to Aloy and the shamen. There are all manner of women leading armies and tribes, holding positions of power that more typically feature male incumbents in videogames. And it's all so deeply embedded within the culture of the world and, for the most part, free of lazy stereotypes that it feels just as natural as it should.

Aloy is the kind of hero we can all look up to, and the kind of videogame character more developers should aspire to create. The artistic merit of Guerrilla's creation is unlikely to calm the nerves of publishers in an industry so focused on white, male protagonists, but if *Horizon* can make a decent return, perhaps the idea of powerful women will be less terrifying a prospect to the people in charge of funding projects such as this. ■



Nioh

Fifteen hours in, finally something clicks. We're on a hill approaching a sacked Japanese castle, steeling ourselves for an encounter that has already gone against us four times, against a hulking, purple, stretchy-tongued giant. Until now we have largely played *Nioh* as if it is a new FromSoftware release – understandable, given the extent to which this game pays homage to the *Souls* series and *Bloodborne*. We have maintained respectful distance; we have baited and punished, as is tradition. It is a tactic that has served us well, for the most part, up until now – but this giant's having none of it. He's fast, strong and, worst of all, smart. We decide on a change of approach, switching from a rangy spear to a sword, from the slow, powerful high stance to the faster, flightier medium one. We dart around constantly, getting in a few quick slashes and moving again, never letting up. The demon goes down in seconds, and we haven't taken so much as a scratch.

It has taken a while for us to get the message, but *Nioh* has been telling us how it wants to be played from the first minute. The game's beating mechanical heart is the Ki Pulse, an action-game spin on *Gears Of War*'s active reload: tap R1 after attacking and, if properly timed, you'll regain the stamina (here called Ki) you've just spent. While the *Souls* games reward patience, *Nioh* encourages you onto the front foot. The Ki Pulse invites comparison with *Bloodborne*'s Regain, which allowed you to recover lost health by immediately hitting your attacker. That, however, was an option – one often worth declining. Yet you ignore what Pulse offers at your peril. It's a simple little tweak to an established formula that fundamentally, brilliantly transforms it.

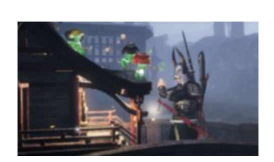
From that single piece of design flows a combat system of flexible, beautiful depth. The R1 button that performs the Pulse is also used with D-pad directions to switch weapons, and with face buttons to change between three stances. Weapon skill trees run several screens deep, and offer up new moves, items and buffs; many are designed to follow – or can only be triggered by – a successful Ki Pulse. When fighting demons from the Yo-Kai realm, their heavier attacks leave behind a ghostly puddle that slows down your Ki regen. A perfectly timed Pulse will cleanse the area, removing the obstruction. *Nioh*'s weaponry choice, split into a handful of fixed archetypes for melee and ranged combat, may appear scant. The reality is very different.

A dip into your inventory tells a rather different story, too. *Nioh* bathes you in loot. It's a hangover from an item-degradation mechanic that was ditched after its alpha demo and results in a game that owes as much to the *Diablo* series as the *Souls* games. Rarer gear offers stat bonuses and elemental tweaks; unwanted drops can be dismantled, sold, or traded in for XP.

The torrent of new, incrementally more powerful gear can be overwhelming, and the sight of your swollen inventory intimidating. Find a favourite, however, and it can carry you through the whole game, since a *Destiny*-style infusion system lets you raise an item's level by feeding more powerful gear to it. A transmog mechanic lets you give one weapon or armour piece the visual appearance of another. And throughout you're picking up materials for crafting even more powerful tools. The result is a game that feels like it wants you to spend as long in the menus as you do on the battlefield, but there are few finer sights in videogames than a boss or big enemy dying in an explosion of multi-coloured loot.

Developer Team Ninja
Publisher SIE
Format PS4
Release Out now

It has taken a while for us to get the message, but Nioh has been telling us how it wants to be played from the first minute



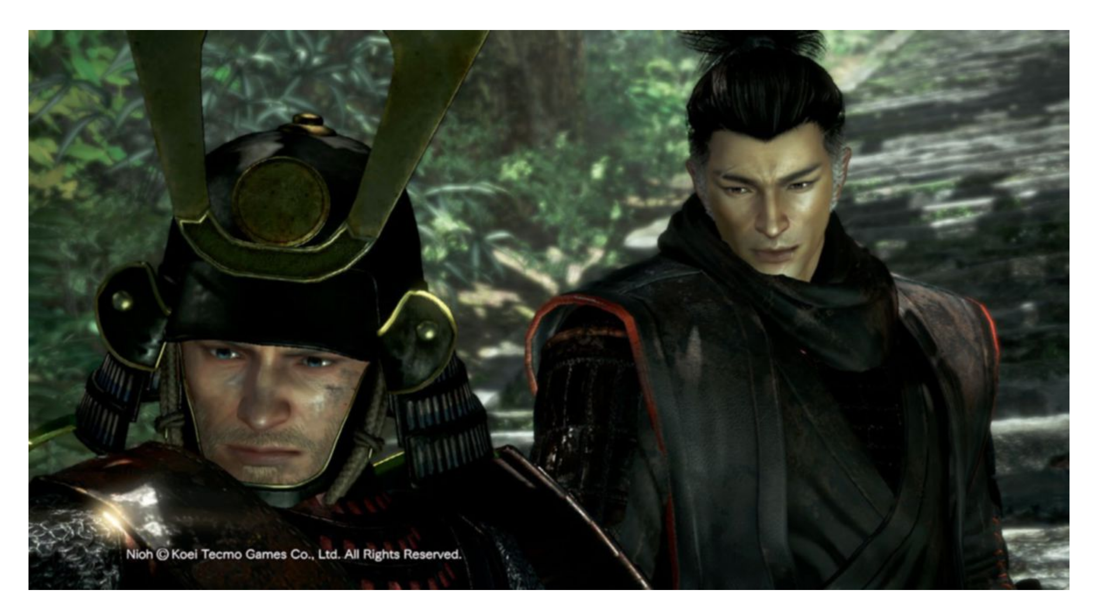
THANKS KODAMA
Perhaps best known on these shores as the rattling white forest spirits from Studio Ghibli flick Princess Mononoke, kodama are restyled here as an essential collectible. A total of 150 dot the game world, hiding around dark corners, on rooftops, or inside breakable scenery. Find one and our hero stoops down, gesturing with his thumb towards the nearest shrine, and the kodama disappears. These are no mere trinkets, however: a sub-menu, accessible from any shrine, lets you choose a kodama blessing, which buffs the drop rates of weapons, armour, materials or, best of all, health elixirs, the size of buff increasing as you collect more spirits.

That's sorely needed because despite the potential vibrancy of its setting, *Nioh* is dark and often muted. Instead of a *Souls*-style interconnected world, this is a game of distinct levels – which should, in theory, allow Team Ninja to offer a degree of variety, of different geography, scenery and times of day, freed of the burden of crafting a coherent world. Yet it's set largely at night, or underground, or in the driving rain, or bits of all three. Given that this feudal-era Japan is in the grip of both a war and an invasion by underworld spirits, perhaps the muddy, nocturnal, oppressive tone is appropriate. But when the sun is allowed to peek through – a role only really available to it in sub-missions, which often take you back to cleared-out areas at a different time of day – you'll wish its presence had been the rule rather than the exception.

Level design, meanwhile, is a little inconsistent early on, where maps are somewhat flat and predictably laid out, particularly to a *Souls* veteran. If we're being kind, that's by design, since Team Ninja wants you to focus on learning the intricacies of that marvellous combat system. Things improve as you progress, as you're dropped into complex, corkscrewing levels that manage to surprise even when they're seemingly going through the motions. The standard-issue poison level, for instance, is based not solely around toxicity but on a device that enables you to clear the air for a few seconds at a time. Elsewhere, there's a degree of freedom in how you work through a level – clearing out the mines below, for instance, can reduce the enemy threat above ground – while a ninja-infested mansion is the finest puzzle dungeon you'll find this side of Sen's Fortress.

And there's just so *much* of it. Dozens of levels, each ending with a unique boss fight, await on the main path; there are scores of sub-missions too, and the punishingly difficult Twilight Missions for true masochists. Before release it was easy – tempting, even – to write *Nioh* off, to dismiss it as a *Dark Souls* impostor whose maker hasn't made a decent game in more than a decade. Yet this is a game that takes the foundations of one of the most intoxicating RPGs around and builds them into a fast, fluid, simply enormous action game as good as anything Team Ninja has ever made.

9



LEFT The game casts you as William Adams, the first English samurai, working with the likes of Hattori Hanzo. This is no work of historical accuracy, however; there are far too many massive demons for that. BELOW Most sub-missions send you back to already cleared areas, but some, like this memorable battle, take place in brand-new locales. MAIN Ki is not just Adams' most important resource. Enemies have a visible Ki bar of their own, and if you drain it, the benefits are huge



ABOVE Weather effects are less striking when viewed in Nioh's Action mode, which prioritises a high framerate at the expense of visual fidelity. Other modes let you put image quality first, but 60fps feels essential to us





Sniper Elite 4

The second option you're presented with on starting *Sniper Elite 4*, just after gamma adjustment, is whether or not to use the series' now-infamous Kill Cam. Squeamish players can shield themselves from the game's unflinching depiction of fracturing bones, spiralling brain matter and ruptured testicles even before choosing to invert their Y axis, then, but to do so wouldn't be in keeping with the game's spirit of perfectionism, and you would deprive yourself of some of the most satisfying payoffs in any videogame.

The *Sniper Elite* series has always been about patient refinement, both in the sniper roleplay fantasy it presents to players and in the way Rebellion candidly admits its relative lack of resources but soldiers on with incremental improvements in each instalment. And with *Sniper Elite 4* the studio has reached something of a watershed moment – this is its most confident, appealing and generous *Sniper* offering to date, and while it doesn't stray far from its predecessors' template, it sees the series finally reach its full potential. Playing a *Sniper Elite* game need no longer be a guilty pleasure.

In fact, it's a little disarming to discover how much the game reminds us of recent entries in the *Metal Gear Solid* series. *The Phantom Pain* is channelled in each sprawling open map, while enemies are just about the right blend of persistent and credulous. And *Guns Of The Patriots* comes to mind each time you find yourself in the middle of an active warzone, sticking to the shadows to shift the balance in one side's favour. You can even mantle up onto ledges and clamber up drainpipes to infiltrate buildings; there's some light platforming to be done here and there as you get about; and dangling out of sight waiting for some poor sap to walk into arm's length is positively encouraged. Moving about the world feels much more fluid than in previous *Sniper* games, even if protagonist Karl Fairburne never quite feels like he has any real weight, and your options for running rings around your enemies are expanded tenfold with this modestly increased moveset.

But for all the additional polish, this still feels very much like a *Sniper Elite* game, losing none of the series' personality (though Fairburne has none to misplace – he's the kind of dull, hyper-macho American hero who takes the edge off every Game Over screen by dint of being entirely impossible to care about). The game's World War II setting is beautifully observed, however, and manages to blend historical authenticity with some rather smart level design. And Rebellion has ensured that the game's sniping mechanics are deep without being overwhelming. You must carefully consider your position and available cover – and you'll want to keep moving in order to avoid being located. You need to be aware of the distance to your target, and zero your scope accordingly, adjusting the range to suit the shot. You can empty your lungs and lower your heart rate in order to steady your aim for difficult shots. And you must be patient. Slap the difficulty up to Authentic (each setting offers a surprisingly big jump), and you'll need to take into account wind speed and direction, point-of-impact shift, muzzle velocity and realistic ammo clips that see you lose any unspent ammo when you reload.

Developer/publisher Rebellion
Format PC, PS4, Xbox One
Release Out now

It's a little disarming to discover how much the game reminds us of recent entries in the Metal Gear Solid series



FAR DIE
Sniper Elite 4's campaign can be played in its entirety with a co-op partner, and the game comes with an expansive suite of sniping-focused multiplayer options. It's a generous package, but none particularly crackle with energy. Standard and team deathmatch are rather tepid affairs that mostly involve both sides lying down on the ground, or lying down on roofs, or lying down in doorways. Kills accumulate at an agonisingly slow pace, and while the sense of tension is potent, it doesn't quite come off as the life-and-death battle of wits we'd hoped it would be. Variants on this include Distance, in which the team with the highest cumulative kill range is victorious, and No Cross, which puts an impassable No Man's Land between each team. All good ideas, but the reality doesn't bear out the promise.

But on normal difficulty, at least, *Sniper Elite 4* doesn't punish you too harshly for errors of judgement or impetuousness. Miss a shot or blow your cover, and it's possible to shoot your way out with a sidearm – though it won't take many hits before you go down. Enemy soldiers are also proficient when it comes to flanking and surrounding you, and they'll travel a surprising distance to investigate noises, meaning that the route in you left clear behind you might not stay that way for long. In fact, the moments when you can see no clear escape and must hunker down under fire with only a handful of ammo clips and a couple of stick grenades, lying in wait for each opportunity to aerate enemies' internal organs as they gradually move closer to you, are some of the game's most thrilling. *Sniper Elite 4* is unexpectedly pliable, happy for you to segue between play styles and move in and out of cover as you see fit. Little touches – such as the way that lone enemies will sometimes turn tail and run, stumbling in the process, when you rush them – underscore this new focus on flexibility and encourage you to experiment up close to your victims as well as from 500 metres away.

That's also roughly the distance you'll want to be from any of the main characters when they're delivering the game's consistently terrible, cliché-stuffed script. Fortunately, cutscenes are skippable, and Fairburne's in-game quips and comments are so gruff that they're easily lost amid the gunfire and explosions. There are bigger issues, though. We're not sure why we're unable to switch the camera between shoulders when aiming, but it makes it considerably more dangerous to emerge from the right of any target and feels oddly limiting in a game that so exuberantly crows its commitment to freedom of choice. And while there are varied and plentiful primary and optional mission objectives to tackle on every map, they all boil down to shooting or making things blow up. The clue is in the game's title, of course, but it can still feel a little one-note if you tackle too much of the campaign in one sitting.

But none of this tarnishes Rebellion's bright-eyed, big-hearted offering. It's created a genuinely good, if characteristically scrappy, stealth game that represents a new high-water mark for the series. And while *Sniper Elite 4* absorbs lessons from genre exemplars such as *Metal Gear* and *Splinter Cell*, it never forgets its provenance – nor the many fans who've dedicated themselves to the series – in the process.

7





ABOVE Fairburne's greater physical prowess means that simple platforming challenges such as this sometimes provide the route to the best sniping spots. But while our hero can climb, deep water remains instantly fatal





MAIN Warzones provide excellent opportunities to disguise the noise of your gun and hide in plain sight. ABOVE Landing a shot exactly where you intended is immensely satisfying, if a little macabre. LEFT Melee kills now also make use of the Kill Cam to grisly effect

Torment: Tides Of Numenera

Eighteen years on from the release of *Planescape: Torment*, this spiritual successor picks up the cult RPG's legacy and brings it to a new setting. Moving away from *Planescape* – a multidimensional spinoff of Dungeons & Dragons – *Torment: Tides Of Numenera* is set in the Ninth World, the focus of Monte Cook's more modern pen-and-paper roleplaying game, Numenera.

That transition is important because, like its tabletop counterpart, *Tides Of Numenera* actively pulls away from D&D and its influence. This new system places heavy emphasis on flexible storytelling and player agency, giving no special precedence to combat, loot, dungeons or monsters. It's a system where fighting and killing are optional, companion characters are only necessary if you decide that they are, and where loot is only useful if it solves the task at hand.

The Ninth World is Earth, one billion years in the future, a planet irrevocably changed by the passage of countless advanced civilisations. The world you inhabit is approximately medieval, but unknowably complex ancient technology is everywhere. In the first hub city of Sagus Cliffs an order of scientist monks makes its home within a tower whose members believe to be some kind of ancient craft, whose engines power forges in the lower parts of the city. But they have no way to make it work, and they have no word for 'spaceship'. That's one background note in a game that's packed with detail, expressed through reams of descriptive writing.

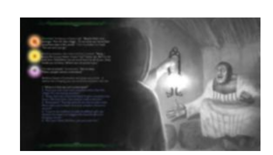
Your character is The Last Castoff, a 'newborn' created by an immortal being called The Changing God who creates and occupies new bodies to prolong his life. Each time he departs for the next body, a consciousness is spontaneously created within the old one. These castoff people, of who you are the most recent, are hunted by a transdimensional creature called the Sorrow. Discovering a means to stop the Sorrow is the thrust of your motivation, but *Torment* places less emphasis on this than it does on the Ninth World itself and the companions you may meet along the way: a woman surrounded by ghostly shades of herself in a variety of alternate timelines, a little girl who speaks to the god she keeps in her pocket, a disillusioned fellow castoff, and many others.

This is a game of walking, reading and talking through small but dense hub areas, the first of which is the city of Sagus Cliffs. A flexible skill-check system is used to resolve challenges. Whether you're trying to move something heavy, identify an ancient object or sway somebody's opinion, you commit resources from one of three pools – might, speed or intellect – to increase your odds of success. By enhancing your pools or picking up new areas of expertise, you specialise your character towards certain tasks.

Combat is optional and takes place only in the context of a Crisis, a distinct mode where the game becomes turn-based but the same skill-check system is used. While there are a few new rules governing combat, the majority of the game's usual actions are still available. Hiding, speaking, using items and manipulating devices can all resolve a fight without bloodshed, providing you've prepared your character to do so.

Developer InXile Entertainment
Publisher Techland
Format PC, PS4, Xbox One
Release Out now

The sidequests are among its strongest features, challenging your expectations about how RPGs are structured



LINK TO THE PAST
Tides Of Numenera has no narrative link to the original *Torment*. Instead they share a design sensibility, particularly an approach to storytelling that focuses on attacking a single question from multiple angles. *Planescape: Torment* asked, 'What can change the nature of a man?' *Tides Of Numenera* asks, 'What does one life matter?' Each narrative thread reflects on this in some way, from your own character coming to terms with their unique heritage, to your companions, who find their own answers as they travel with you. The original's tale of a single being living multiple lives is inverted here, as the Last Castoff encounters the memories of the things The Changing God did while occupying the body that would come to be yours.

***Torment*'s sidequests are** among its strongest features, challenging your expectations about how RPGs are structured and how their stories are told. At first, the notion of picking up tasks from strangers around a city hub seems very familiar from other innumerable games. Where *Tides Of Numenera* sets itself apart is in the intricate interweaving of these storylines. One plot might task you with uncovering the meaning behind the actions of one of your fellow castoffs. That might lead you to a corpse, where the manner of death is less important than the fact of it – something you can put to one side as you deal with the matter at hand. However, reading between the lines uncovers a link between the manner of that death and an additional, entirely unrelated plotline. Furthermore, the life of the deceased has ramifications for a *third* plotline, and you can pick up any of these threads in any order and uncover the complex interrelated lives of the citizens of the Ninth World at your own pace, in your own time.

Tides Of Numenera's characters aren't confined to their own narrow plotlines. As such, the narrative feels organic in a way that computer RPGs rarely do – indeed, the effect is closer to a well-run pen-and-paper campaign. The tradeoff is that it takes a self-motivated player to get the most out of an RPG structured in this way. Not everyone will gel with the game's heady high concept – and its text-heavy manner of expressing it – or enjoy the process of bringing those interweaving threads together. *Tides Of Numenera* is about watching disparate plotlines, characters and ideas assemble in aggregate to form a vastly unusual world and, in its best moments, a philosophy – one coloured by your own outlook and actions. Yet this comes at the cost of the most accessible elements of a traditional fantasy story, such as an obvious villain or clear stakes. The Last Castoff isn't, despite their provenance, particularly special. There are lots of castoffs. The Last Castoff just sort of *is*, and that's the point, but it's a less grabby jumping-on point for a new or unconvinced player than "slay the dragon".

Yet this is precisely what fans of the original *Torment* will want to hear, and *Tides Of Numenera* has the potential to bring in a new audience that has never played a game that expresses ideas in this way – particularly on console, where these kinds of throwback RPGs are only just finding a foothold. There are worlds waiting to be discovered beyond the confines of traditional fantasy. This is one of them.

8





ABOVE Based on the same engine as *Pillars Of Eternity*, there are moments when *Torment*'s art direction matches its evocative writing. At other times, it doesn't quite come together: monotonous backdrops can be an issue.





TOP The Castoff's Labyrinth is an abstract realm within your mind that can be visited under certain circumstances – often when you die. Your actions change the layout of the Labyrinth, introducing new areas and characters.
MAIN Your actions really do matter. Side characters that can be killed early on in some cases play bigger roles later if they survive. But no approach is necessarily 'wrong'.
RIGHT *Torment* is interested in subverting traditional fantasy ideas. Sagus Cliffs' resident flesh-eating death cultists are not necessarily villains, or even unfriendly. They provide a public service, ingesting the memories of the deceased for future study

Aaero

The *Rez* comparisons are as unavoidable as they are misleading. Like Tetsuya Mizuguchi's masterpiece, *Aaero* is a rhythmic rail-shooter, where your actions are inextricably bound to the beat, and where you target enemies and their projectiles by sweeping a large reticle over them, locking onto a maximum of eight before pulling the trigger to destroy them. But there's a minor point of difference even here: you highlight these insectoid aggressors with the right analogue stick before squeezing RT, rather than holding, locking on and then releasing. More importantly, your lasers will fire straighter and truer if you launch on the beat or just before; this means that not only do you have to wait less time before shooting again, but you'll also gain a score boost for your efficiency.

While the pulverising percussion and rumbling bass of a soundtrack from the likes of Flux Pavilion, Habstrakt and Noisia will leave your speakers shaking, it's the distorted synth lines and occasional vocalised melodies to which your attention will be quickly drawn. As your ship races down tunnels and passages, you'll see bright blue ribbons to which you must cleave to build your score multiplier. The closer you're able to adhere to these glowing strips, the more sparks they'll release, and the greater the buzz of feedback you'll feel in your palms. Subtle shifts in pitch are easy to track, but often it's like trying to trace a cardiogram, as the more violent oscillations have you darting left and right, or arcing up and around from one side to the other. A 75 per cent accuracy rating might not sound great, but anything above that and you're doing well.

Aaero is at its best during these sequences, especially when it introduces the threat of environmental hazards. A gauntlet through a series of imposing mechanical crushers is a tense highlight, while another features slamming gates that force you to dodge through the narrow gaps that remain. These sections are usually enemy-free, but later the game dares to introduce targets as you're riding a ribbon to ramp up the challenge: you might think you can manoeuvre two analogue sticks independently, but under pressure it's another matter.

For all its mechanical innovations, however, *Aaero* can't consistently match the synaesthetic joy of its biggest influence. The added impetus of hitting the beat doesn't prevent the shooting sections from being markedly less interesting: outside of a trio of boss battles, the enemy design is uninspired, and one shielded variant is more of an irritant than a challenge. This isn't enough to prevent us recommending an otherwise absorbing and highly replayable rhythm game – even if it's not quite wub at first sight.



Developer Mad Fellows
Publisher Reverb Triple XP
Format PC (tested), PS4, Xbox One
Release Out now



FRIENDLY FIRE

There are two further difficulties above the default setting, as well as a Chillout mode in which you can't die. Since you'll need plenty of stars to unlock the later songs even in Normal difficulty, this is a pressure-free way to practice and learn enemy patterns. Each course also hosts several bonus targets, some of which are only onscreen for a matter of moments: this lets you memorise their locations without having to worry about incoming missiles.

Since foes only explode on the beat, one or two lower-tempo songs can leave you briefly unsure whether your shots are about to land. Indeed, one leaves in a warning siren for an imminent collision to fit the music



Dexed

If *Dexed* seemed to come out of nowhere, that's because to all intents and purposes it did. Conceived during an internal game jam at Ninja Theory, it was assembled by a team of eight within a month and then polished for the next two before being announced and released. You can see why it won, just as the short development time will come as no surprise once you've clocked its four levels and single boss stage well within an hour.

It's a rail shooter, yet acknowledged influences including *Ikaruga* and *Panzer Dragoon* suggest an intensity *Dexed* consciously lacks. Instead, it's conducted at a relatively sedate pace, as you're gently carried along on a translucent current through four elemental biomes. You're armed with two types of shot – fire and ice – with which to hit targets of the opposite polarity, your score multiplier building for each wave eliminated without error. They'll fire back if you hit like with like: deploying a shield will prevent your score from burning down or freezing, though you'll lose your combo either way. As in *Rez*, you're encouraged to paint several targets for a multi-lock before releasing the trigger. Clear individual targets quickly and you'll safely maintain your multiplier; you'll need to bide your time for bigger score bonuses, but delay the release too long and you risk targets disappearing from view before your shots can land.

It's designed primarily for a pair of motion controllers: moving two reticles independently through waves of intermingling orange and blue targets should in theory produce higher scores. Yet we fared better with a DualShock, a two-handed grip naturally resulting in a steadier aim. As a score-chaser, however, it's not without flaws. Though you can cancel an errant lock, enemy patterns are tricky enough to necessitate a slight stickiness to targeting: though you'll rarely latch onto a target you intended to sweep by rather than over, on occasion you'll need to paint a target twice before it registers. Audio feedback is a little muted, too, and when things get busy it can be hard to distinguish between projectiles and enemies.

Still, if the result sometimes feels more like a robust proof of concept than a complete game, it's a reasonable outlay for an afternoon's fun. Indeed, weighing up the cost of developing for VR against its comparatively limited userbase suggests small, inventive experiments that allow devs to let off creative steam between bigger projects might well be where the format's immediate future lies. That may not be why you invested in the hardware, but VR's position just outside the mainstream makes it the ideal home for unconventional, diverting short-form experiences such as this.

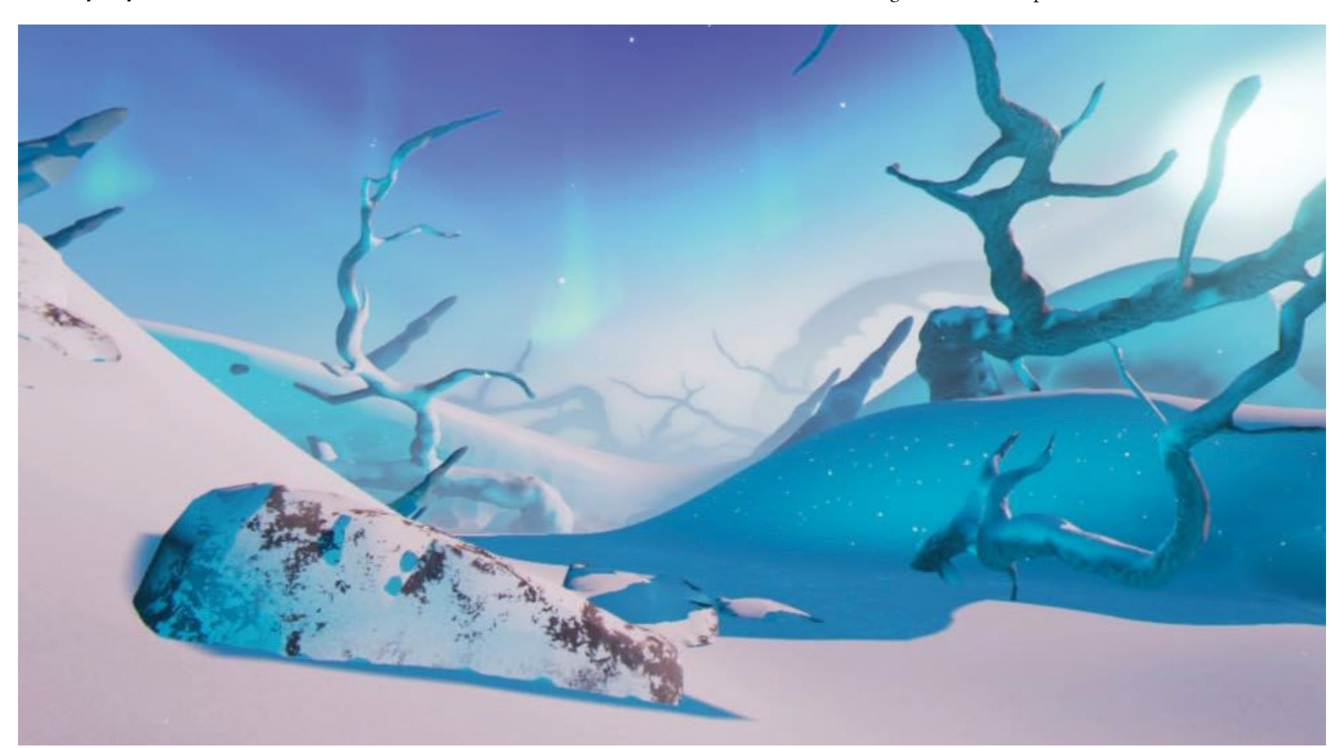
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Developer/publisher Ninja Theory
Format PSVR (tested), Vive
Release Out now



THRONG OF ICE AND FIRE
Though Hard mode punishes mistakes more severely, *Dexed* is still a relatively lightweight challenge. The difficulty ramps up in the game's wave-based Arcade mode, held in a room with circular gates from which trails of enemies appear, requiring you to eliminate them before they exit through another. Here, you'll find the odd skull that's primed to explode – you'll need to first freeze them to extinguish the fuse, then launch a fireball to finish them off.

In Zen mode you're invited to set the controllers down and luxuriate in the views. The underwater and snow levels are rather pretty, though it's unlikely many will bother with a return visit to the volcanic section



Dandy Dungeon

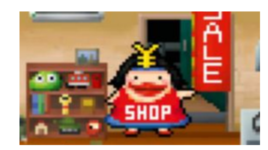
And we thought *Yakuza 0* was going to be the weirdest game we'd play this year. This delightful oddity from *Little King's Story* and *Chulip* creator Yoshiro Kimura centres on a lonely, disillusioned 36-year-old salaryman, Yamada, who quits his job at a social-gaming company to be a bedroom coder. The game he makes is the one you play: a dungeon-crawler that accrues new features as he receives inspiration from an array of visitors including former workmate Yasu and his furious ex-boss (we've had a few insults hurled our way by game villains in our time, but "bumbling turdbag" is a new one on us).

More importantly, there's his new neighbour Maria, with whom Yamada falls instantly and hopelessly in love. His affection can seem uncomfortably ardent, but a terrific localisation paints him as a naive fantasist who is nevertheless acutely aware of his shortcomings. Any triumphs are usually undercut by a sharp note of self-mockery, such as when he creates a dungeon with randomly generated features, claiming it as a new idea before its name is revealed as Yamada The Wanderer.

Dungeons comprise several floors, each set on a 5x5 grid, upon which you must draw a continuous line from entrance to exit. You can spend as long as you like

Familiar iconography – green pipes, pink dresses, a moustachioed hero with a paunch – positions Yamada and Maria as an alternate-universe Mario and Peach. Here, the princess isn't in another castle, but in its lead's imagination

Developer Powerchord Studio/Onion Games
Publisher DMM.com Ltd
Format Android, iOS (tested)
Release Out now



DUCK BILL

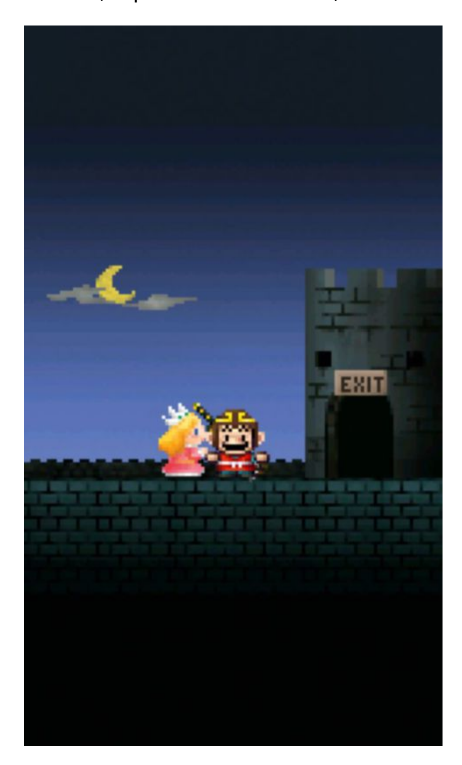
Each quest costs Yamada some stamina, but the gauge refills when he levels up, so you'll rarely need to wait. Alternatively, impatient players can spend £7.99 on a companion duck that lifts the lonely protagonist's spirits so he'll never be fatigued again. Valuable consumables, like the rice balls that revive Yamada when he collapses, are promoted in brazen fashion: a representative for in-game shop Mamazon knocks on Yamada's door, accompanied by a jingle you'll be humming all day.

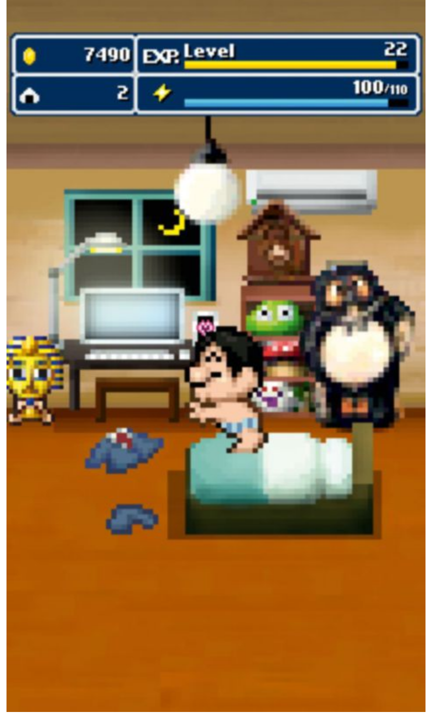
working out the route, but once you've pressed finger to screen, you have a limited time to plot a course before you'll receive damage – and you'll take a hit for each square you don't cross. Cash bonuses incentivise perfect pathfinding, and with Yamada's level resetting between expeditions – thus keeping you on your toes even when revisiting previous haunts – you'll need that money to buy better gear to survive later quests.

That loop is irresistibly moreish, and though it may seem straightforward, Kimura steadily gives you more plates to juggle and decisions to make. Yamada's backpack, for example, only ever holds five items, each of which is subject to a cooldown once used and liable to break through overuse – but can you afford to throw away a vial of medicine for a thunder scroll? And would that rice ball you were saving for an emergency continue not be better served to a hungry ally who'll brave the trials of a bonus dungeon to grab you some rare loot?

Like its designer's earlier works, *Dandy Dungeon* has robust depths beneath the outer layers of nuclear-strength whimsy. Such a concentrated dose of off-kilter charm might be cloying to some players (admittedly, we're in a reasonably good position to identify with a doughy thirtysomething in his underwear furiously tapping away at a PC), but you'd have to be a bumbling turdbag not to at least give Yamada the chance to win your heart.

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Mark Of The Ninja

Revisiting the surgical design of Klei's genre-capping stealth game

By Edwin Evans-Thirlwell

Developer Klei Entertainment **Publisher** Microsoft Studios **Format** 360, PC **Release** 2012

Klei Entertainment's breakthrough project is a work of both ambiguity and transparency, a game that lays the foundations of its genre bare in order to swaddle them in its own, exquisitely considered brand of murk. Set against the brash grindhouse stylings of the studio's *Shank* brawlers, *Mark Of The Ninja*'s environments can seem rather opaque and bloodless, its temples, office blocks and metro tunnels leeched of colour save for the odd tastefully tinted desk ornament and the glare of a distant Tokyo. On playing for the first time, there's the mild shock of discovering that your vision is limited by that of your protagonist – par for the course in a stealth game, but an unusual move for a scrolling 2D platformer.

If this is a realm of unremitting gloom, however, it's also one that is forever giving itself away via an intricate set of visual metaphors and extra-diegetic feedback. Sounds are represented as expanding rings with a maximum diameter, letting you know immediately whether the shriek of a sloppily executed goon has reached the ears of his comrades. Enemies standing in darkness don't disappear entirely but fade to spectral outlines; those you can hear but not see are reduced to foggy silhouettes with no view cone, trailing ripples of footstep noise. Awareness states are delicately yet unmistakably sketched – idling opponents let their flashlights hang low, while suspicious souls stick their necks out invitingly as they peer into the black. Should you be rumbled, there are last-known-position indicators and *Metal Gear*-style emotes to help you slip through the opposition's clutches.

Each chapter's opportunities and hazards are carefully compartmentalised, their knock-on effects seldom spilling much farther than the room you're in. Discussing an earlier, unsuccessful flirtation with fully open environments, lead designer Nels Anderson suggested in 2012 that the ideal size of an encounter in a scrolling 2D game is the space of the screen plus between half to three-quarters of a screen in any direction. Any larger, he claimed, and players will feel lost or overwhelmed. The sprawling yet intelligible architectures of *Metroid* and *Castlevania* are an obvious influence; a more recent parallel is *Batman: Arkham Asylum*, with its procession of single-chamber sandboxes prowled by increasingly rattled goons. As in Rocksteady's game, most of *Mark Of The Ninja*'s grander interiors are hung with grappling points where you can perch in relative safety, monitoring patrol patterns and weighing up angles of attack.

Making a stealth-game protagonist capable enough to thrill, but not so powerful as to render stealth optional, is one of game design's harder balancing acts. Some teams have given up on the idea completely, preferring to treat subterfuge as just one tool in the arsenal: the latest incarnation of *Splinter Cell*'s Sam Fisher is as much a bull in a china shop as a snake in the grass. *Mark Of The Ninja*'s answer to the problem is to draw a clear line between concealment and exposure. To stand in the shade is to be almost undetectable, save for when facing guards equipped with infrared goggles or guard dogs (the latter apparently a nod to Klei's neighbour at the time of development, the now-defunct *Sleeping Dogs* studio United Front Games). To stray into the light is to be spotted and, typically, gunned down from across the map. This straightforward divide allows for more confident, slipshod improvisation than in a stealth simulation such as *Thief: The Dark Project*, with its tricksy analogue lighting, without robbing carelessness of its risks.

The other way *Mark Of The Ninja* empowers you is by making you feel like a ninja – a consummate infiltrator, rather than the pyjama-clad circus tumblers we encounter in games like *Ninja Gaiden*. Created using modifiable character pieces that approximate the feel of traditional hand-drawn animation, the game's glowering lead is a master of traversal, able to wriggle up a wall, slither around an overhang and butcher sentries from below with a grace the likes of *Overwatch*'s Genji could only dream of. The controls are idiot-proof, helped along by unobtrusive context-sensitive prompts and the sensible decision to freeze time while aiming throwable items – a mystic perk that allows you to queue ▶

up volleys of bamboo darts in mid-air, disabling laser grids as you plunge towards them. This is a game that knows that tasks are more enticing when you're deciding what to do, rather than working out how to do it. The only time you'll really have to think about the controls is while performing assassinations, a simple QTE that stops you tearing through guard populations without thought. Fudge the inputs and your victim will cry out as they expire.

With these foundations in place, *Mark Of The Ninja* reveals itself to be a series of sinuous system-driven puzzles, each solvable a number of ways (including a few not anticipated by the designers) and supported by a scoring system that goads you into meddling with the props and variables at length. Escaping a room with a laser tripwire might see you scurrying across the ceiling, tossing a smoke bomb or dropping a security officer's body into the beam's path to deactivate it. Unpicking a well-defended position might involve flicking a light switch to lure one goon away from the pack, then lobbing a mine behind him so that he expires messily as he returns, startling the others into shooting each other. The checkpointing is generous, so every sticky demise is less a setback than an opportunity to experiment afresh. The game rarely imposes any specific win criteria, but there are a few more structured tasks and sequences to vary the pace – tailing a thug through the level without breaking cover, for example – together with some optional treasure rooms that feature traditional, switch- and trap-based puzzles. There are bosses, too, but anybody hoping for a spell of cathartic health bar attrition will leave disappointed – your ninja can punch his way out of a tight spot, but only ever draws his blade to deliver a killing stroke.

The grappling line is your most dependable tool, and the most overt nod to *Batman: Arkham Asylum*: you can string people up with it to terrorise their allies

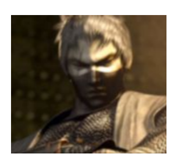
Perhaps inevitably, the game's narrative wrapper can't hold a candle to what happens when NPC behaviours, layouts and your abilities rub together. The tale of a venerable ninja clan's struggle against a military corporation, it tees up familiar themes of revenge, self-sacrifice and becoming what you despise. The cutscenes, recalling the slashing brushstrokes and moody palette of Genndy Tartakovsky's hit animated series Samurai Jack, are worthy of attention, however, and if the script is occasionally terse to the point of becoming flavourless, it can be amusingly malevolent. "The beginning of a kill is like embracing a lover," remarks your ally Ora during the tutorial level. "The end, of course, is not." Klei's cat-footed approach to backstory also deserves applause: in place of the flabby audio diaries and tomes of other games, this one delivers its lore in the form of bloodthirsty haiku.

YOUR NINJA CAN PUNCH HIS WAY OUT OF A TIGHT SPOT, BUT ONLY EVER DRAWS HIS BLADE TO DELIVER A KILLING STROKE

Very few of *Mark Of The Ninja*'s tricks are of its own invention, but they're wielded with a crispness and precision that owes no small debt to the use of a 2D plane – an

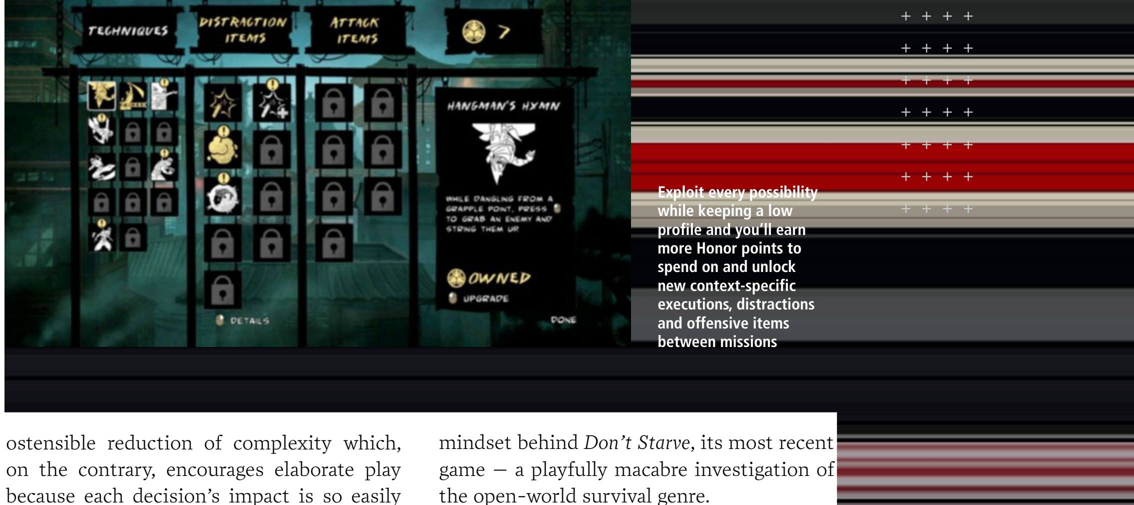


Klei hoped to use traditional frame-by-frame animation for the ninja, but the approach fell foul of problems linking the character to effects, plus Xbox 360 memory limitations



DIM PROSPECTS

Stealth games entered the mainstream alongside the maturation of 3D polygonal graphics, with *Thief: The Dark Project*, *Tenchu: Stealth Assassins* and *Metal Gear Solid* leading the charge in 1998. It was something of a false dawn, in hindsight – *Tenchu* is all but forgotten today, and while *Thief* is highly regarded, it hasn't spawned successors so much as a series of more calculating action adventures (such as Arkane's *Dishonored*) that leverage its agility, ornate steampunk aesthetic and storied environments. *Metal Gear Solid*, meanwhile, has become practically its own genre. Ubisoft's earlier *Splinter Cell* is perhaps the definitive stealth series in terms of features, but it's all but vanished following 2012's *Blacklist*.



Exploit every possibility while keeping a low profile and you'll earn more Honor points to spend on and unlock new context-specific executions, distractions and offensive items between missions

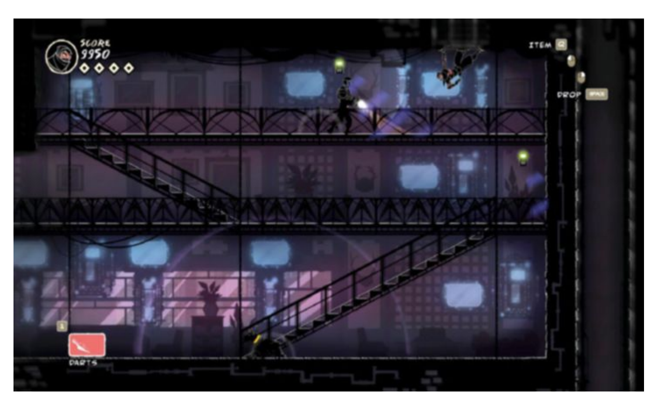
ostensible reduction of complexity which, on the contrary, encourages elaborate play because each decision's impact is so easily traced. In boiling off the third dimension, Klei has crafted not just an accomplished genre piece but a deconstruction of games such as *Metal Gear* or the *Arkham* series, one that sets out to understand their appeal without simply replicating their feats.

This is a pleasing twist because stealth games are already exercises in deconstruction – in asking you to hide within a world they also place you a little outside it, encouraging you to develop a designer's appreciation of its inner workings to prevail. Klei would continue the process with 2014's *Invisible Inc*, a marriage of *Mark Of The Ninja* and *XCOM*, which breaks the mechanics of infiltration down turn by turn, and piles dynamic map difficulty on top. There are glimmers of the same analytical mindset behind *Don't Starve*, its most recent game – a playfully macabre investigation of the open-world survival genre.

One of *Mark Of The Ninja*'s darker secrets is that it almost wasn't a pure stealth experience at all. The deft presentation and balletic handling came to fruition late in the day, as Klei struggled to balance the AI and translate concepts from 3D games without ruining them. At one point, the project's leads were convinced Microsoft would cancel the game, and toyed with expanded combat mechanics as a last-ditch remedy – this soon proved counterproductive, as playtesters would simply gallop through levels beating up any opponents they came across.

These difficulties may explain the slight sense of diminishing returns that sets in towards the end of the game – Klei had intended to add a number of game-changing superhuman abilities, but was eventually obliged to settle for just one of them, a teleport spell. But if the final stretch underwhelms, that's largely because the game makes such a mesmerising first impression. *Mark Of The Ninja* is that rare stealth game that never loses sight of itself, the impeccable presentation, well-judged interaction between systems and animation suite investing the often dry art of evasion with unusual energy. Its pleasures aren't a departure for the genre but a consolidation and intensification of it – a predatory exploration of ideas that are in danger of being lost in the light. ■

Unlockable outfits apply passive benefits such as muffled footsteps, greater resilience and more inventory room, encouraging replay





JAMES LEACH

Postcards From The Clipping Plane

Conveniently ignoring the serious side of videogame development

What makes a game satisfying? I mean, some games are astonishing, some are chilling, many are immersive and beautiful, but more than any other attribute, I want to be satisfied. I want a game to engage me and impress me, but more than anything, I want it to feel… right.

Confused? Read on, because I've done some thinking here. The first thing that satisfies me is knowing the game world. Actually being told, concisely and, this is just me, with a hint of humour, what the situation is and what I need to do. I want to face a problem to rectify, and to have my imagination fired up so that before anything else happens, I'm thinking of ways to sort it. Even if I'm jumping the gun with my plans, I know that simply wanting to see how I can get my game on and solve things is a good sign. It means that I've bought in, and that I'm considering different approaches. A series of tasks presented in order won't do this, and thus isn't satisfying. I have to perceive, however erroneously, that I am choosing how to approach the game.

Next, I would like to be surprised. I'd like everything I was previously planning to be thrown into doubt because there's more to the game than I thought. For example, I was planning to get the tech or weapons, defend, and let them come to me. It turns out I can't because I have to source the Impossible Crystal. That's going to take some time, but I know why I need it and off I go. Satisfyingly.

Then I want a massive win. I want to think I'm great at the game because the first battle was easy. My strategies worked and I'm already coasting to victory, and I want this because I know what's coming. I want to achieve a lot quickly as I know things are properly about to kick off. A game that does this, to my mind, has simply got me into the thick of the action quickly and efficiently. I haven't had to learn how to walk, run, pick up things and defeat a couple of woodlice. It's taught me how to do things and given me the idea that I can do them well. Because now it's getting real and I'm being taken seriously.



I feel too big and important to be running over roast chickens to boost my health. Give me entire banquets

And now is not the time for plot twists, NPCs betraying me, falling in love, getting a dog and new game-changing discoveries. Now is when I fight hard in the next bit. Every unlock is worth the struggle, and what keeps me ahead is simply being better and knowing how to play. I'm getting a comfort zone, even if it's uncomfortable because it's not easy.

By now my poor, ancient brain has learned the keys, buttons and actions. I'm not fighting the game, I'm fighting the enemy. I know what to do and it's working. So yes, let's have more things to face. But I also need the game to be on my side. Not in terms of being easy, but it needs to make what I do work. When I want to pick up things, it's fine if I'm not directly over them – the game knows what I'm doing and there's leeway. I can get health when I need, I can bust open crates as I pass in one cool move, and I can direct my armies without having to stop and work out how. Part of this is me, getting faster and better, but it's also the game knowing that I want to do these things, and letting me with the minimum of fuss because the foe is surrounding me.

I've always been a fan of cuddly, cute console games and this, I've worked out, is usually why. You tend not to get stuck because you accidentally went a pixel too far. You can enter the houses even if you're not perfectly lined up with the door. Games should know your intentions and allow this latitude. Imagine in real life if you spent ten minutes next to a parking meter because you weren't facing it dead on. You'd quit and starve at home. Which, in my case, would take a while.

The next chunk of satisfaction is in scaling up. I'm doing well, and I feel too big and important to be running over roast chickens to boost my health. Give me entire banquets to max it out and I'm happy, but I want to be thinking in terms of thousands of HP at a time. The game mechanic is the same but it feels a magnitude larger because I'm that much more of a big deal. If the game automatically takes care of such things, I'm also happy – the battles are getting very tough now and there isn't time. I want to forge on even though I should have been in bed hours ago.

And eventually we come to the end. There doesn't have to be the long sequence as a trophy, in the same way that the last part of a meal doesn't have to be the tastiest. I do love knowing how well I've done. I'll take stats if you have them; that'll make me play through all over again. But I simply need to know I haven't missed out chunks of the game, and that, for the love of god, I'm not facing a vastly bigger sequel. Let me just be satisfied.

James Leach is a BAFTA Award-winning freelance writer whose work features in games and on television and radio

Illustration **Box Kite Curve**

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